

International workshop

THE ORIGIN OF EARLY MIDDLE AGES GARNETS

Trade between the Indian subcontinent and Europe from the 5th to the 7th c. AD

June 22 - 23, 2017

Musée d'Archéologie Nationale, Château Place Charles de Gaulle, Saint Germain en Laye
Centre de recherche et de restauration de musées de France C2RMF, Palais du Louvre, Paris

Objective

The workshop aims at presenting the results of research projects on the circulation of garnets, the emblematic gem of the cloisonné style which, in the 5th and 6th centuries, characterized almost all the Western world, from the Black sea to Anglo-Saxon territories and from Scandinavia to North Africa. A majority of these investigations has been carried out using the transnational access to the AGLAE accelerator of the C2RMF open for more than a decade to the scientists working in Heritage in Europe, following the 'Merovingian Garnet' programme initiated in 1999 on the collection of the MAN. These programmes focused on garnets mounted on famous archaeological museum collections from France (notably from the MAN and the Cabinet des Médailles of the Bibliothèque nationale de France) and elsewhere in Europe (Germany, Belgium, the Netherlands, Romania, United Kingdom, etc.) with often unreleased results.

Day 1 at the MAN in Saint-Germain-en-Laye

Presentation of the results of the garnet analyses carried out in the framework of the European programs Eu-ARTECH, CHARISMA and IPERION and other programs elsewhere in Europe (*International Framework / Weltweites Zellwerk*) or in the rest of the world. While garnet analyses has shown that a restricted number of sources, mainly from India and Ceylon (Sri Lanka), were used everywhere in Europe during the 5th and 6th centuries, those exploited later are of European origin, a fact indicating a major change in the Indo-European trade around 600.

The participants will be invited to the inauguration of the exhibition '*Austrasia, the forgotten Merovingian Realm*' in the evening.

Day 2 at the C2RMF in Paris

The **place of the garnet trade in the long-distance commerce between early Middle Ages India and Europe** will be discussed, in particular with historians and archaeologists of ancient India. The terrestrial and maritime routes will be considered (Silk Road, Berenike, etc.). The investigation of garnet raw and worked beads excavated from workshops in Mediterranean rim and from coastal *emporía* in India will be reported. Finally, the extension of the program to garnets from late Antiquity, notably present on necklaces, rings, intaglio, will allow establish the link with preceding periods. A round table discussion will be organized to provide a synthesis, draw perspectives, and plan the publication.

Context

The existence of a long-distance trade, mainly the sea route but also the silk road, between the Indian subcontinent and the Mediterranean world in the Greco-Roman period is well attested by both writings and archaeological evidences, more as concerns the latter in India than in the Western World. On the other hand, written sources that could confirm the persistence of this trade during the early Middle Ages are scarce, at least in the West, and except the *Christian Topography* by *Cosmas Indicopleustes* in the 6th c testifying that precious textiles, spices and gems were still reaching the West, whereas written Indian and Persian sources, and later Arab ones attest it better. However, apart from a few textile remains conserved in church's treasures or exceptionally recovered from excavations like those found in Merovingian graves of the Saint-Denis basilica near Paris, material evidences of this trade remain very rare.

This is no longer the case today, thanks to recent excavations in Western Europe and pioneering laboratory work. It is now possible to establish that at the beginning of the Merovingian period garnets from India and Ceylon were massively employed in the manufacture of cloisonné jewels, which testifying to survival, till the end of the 6th c, of continuous exchanges between the Indian subcontinent and the Mediterranean world.

Organising Institutions

Centre de Recherche et de restauration des Musée des France (I. Pallot-Frossard, director)
Musée d'archéologie Nationale - Domaine national de Saint-Germain-en-Laye (H. Multon, director)

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Publication

The workshop proceedings will be published in a special volume after the workshop.

Communication

F. Durand and A Vervueren (MAN), M. Lionnet-de Loitiere, S. Lefevre and V. Fournier (C2RMF)

Registration

thomas.calligaro@culture.gouv.fr

The workshop is bilingual French/English

Websites

c2rmf.fr
musee-archeologienationale.fr

'Carbunculus, so called from its resemblance to fire'
Pliny, Hist. Nat. XXXVII



Thursday June 22 2017

Auditorium - Musée d'Archéologie Nationale
Topic : Analysis of garnets from Early Middle Ages artefacts

- 8:30 Participants welcome and registration
- 9:20 Welcome and opening address
H. Multon director of the Musée d'archéologie Nationale - Domaine national de Saint-Germain-en-Laye
- 9:40 **N. Adams** - Garnets East And West
- 10:00 **F. Farges** - Grenats: de la Nature à la Culture
- 10:20 **T. Calligaro** - Méthodes PIXE et XRF pour l'analyse des grenats : peut-on leur faire confiance ?

Coffee break

- 11:00 **H. A. Gilg, N. Hommrichhausen, J. Krause, B. Schulz, U. Schüssler** - Raman, electron microprobe and laser-ablation ICP-MS analysis of gem garnets and their inclusions
- 11:20 **P. Périn et T. Calligaro** - Genèse du programme 'grenats' au C2RMF (1999-2017)
- 11:40 **B. Haas-Gebhard, N. Hommrichhausen and H. A. Gilg** - Early Medieval garnet objects from Bavaria
- 12:00 **A. Willemssen** - Characterization of garnets and glass inlays of early-medieval jewellery from the Netherlands

Lunch break

- 14:00 **F. Mathis** - Emploi et provenance des grenats d'objets mérovingiens en Belgique
- 14:20 **C. Higgitt** - The scientific and technical analysis of the Staffordshire Hoard: the study of inlays and garnet provenance
- 14:40 **I. Villela-Petit** - Les grenats du Cabinet des médailles, du Roi des rois au roi des Francs : analyses *in situ*
- 15:00 **M. Aimone et I. Villela-Petit** - La croix de saint Eloi et les grenats du mont Suimo (Portugal)
- 15:20 **R. Marghitu and R. Bugoi** - Investigation of loose garnets from 5th century treasures found in Romania: Pietroasa, Apahida and Cluj-Someşeni

Friday June 23 2017

Palissy auditorium - C2RMF
Topic : Trade between Indian and Western worlds in the Early middle ages

- 9:00 Welcome address
I. Pallot-Frossard, director of the C2RMF
- 9:20 **S. Suresh** - Roman Coins and Other Roman Imports to India: New Perspectives from Archaeology
- 9:50 **P. Rifa-El Nil** - Les grenats du Théâtre Diana, les ateliers romains tardifs d'Alexandrie, Égypte
- 10:20 **K. Schmetzer, H. A. Gilg, U. Schüssler and J. Panjikar** - The garnet beads from *Arikamedu*, India, and their source

- 11:00 **O. Bopearachchi** - New data on the maritime trade in the Indian Ocean: the discovery of a 2nd c. BC shipwreck in Godavaya, Sri Lanka
- 11:20 **J. Ljungkvist et J. Soulat** - Un atelier de taille de grenats locaux à Gamla Uppsala, Suède
- 11:40 **J. Lankton and B. Gratuze** - Roman Glass in the Red Sea Trade
- 12:00 **H.-P. Francfort** - Caravanes et hordes sur la « route de la soie » : de la Chine et l'Inde au monde méditerranéen par l'Asie centrale

- 14:00 **C. Pacheco** - guided tour of the NEW AGLAE accelerator
- 15:00 **C. Pion** - L'importation des perles en verre de type indopacifique en Occident au début de l'époque mérovingienne
- 15:20 **P. Périn** - La question de l'exportation de grenats indiens et singhalais vers l'Europe au Vè et VIè s.

Thursday June 22 2017

Auditorium - Musée d'Archéologie Nationale
Topic : Analysis of garnets from Early Middle Ages artefacts

- 15:40 **I. Bardiès-Fronty** - Autour des grenats de la collection du musée de Cluny, considérations sur le voyage des matériaux à l'époque tardo-antique et altomédiévale
- 16:00 **D. Quast et S. Greiff** - „Weltweites Zellwerk - International Framework“ - an interdisciplinary project on early medieval garnet jewellery
- 16:20 **C. Hedenstierna-Jonson and A. Hilgner** - Studies on Anglo-Saxon and Vendel-period garnet jewellery within the project Weltweites Zellwerk
- 17:00 **E. Horváth** - The late bloom of garnet ornamentation : Provenance study of the Avar Period garnet jewellery in Hungary

Coffee break

- 17:20 **J. Jiřík** - Bohemia and Moravia in Late Antiquity, connection to long-distance trade and problem of emergence of the Czech garnets in archaeological finds
- 17:40 **Ž. Šmit, T. Knific and H. Fajfar** - Analysis of garnets from Slovenia
- 18:00 **T. Calligaro** - Deux exemples de grenats de cloisonné en Austrasie: tombes de Pouan, Aube et de Saint-Dizier, Haute-Marne

Inauguration of the exhibition Austrasia the forgotten Merovingian realm

ADAMS Debra Noel, Furusiyya Art Foundation, London, United Kingdom
 AIMONE Marco, Dumbarton Oaks Museum, Washington, USA
 BARDIES-FRONTY Isabelle, Musée du National de Moyen Age - Cluny, Paris, France
 BOPEARACHCHI Osmund-christie, Ecole Normale Supérieure, Paris, France
 BUGOI Roxana, Horia Hulubei National Institute, Bucarest, Romania
 FARGES François, Musée National d'Histoire Naturelle, Paris, France
 FRANCFORT Henri-Paul, Maison André Ginouvès UMR 7041 ArScan, Nanterre, France
 GILG Albert H., Technische Universität München, Germany
 GREIFF Suzanne, Römisch-Germanisches Zentralmuseum Mainz (RGZM), Mainz, Germany
 HAAS-GEBHARD Brigitte, Archäologische Staatssammlung München, München, Germany
 HIGGITT Catherine, National Gallery, London, United Kingdom
 HILGNER Alexandra, Römisch-Germanisches Zentralmuseum Mainz (RGZM), Mainz, Germany
 HORVÁTH Eszter, Eötvös Loránd University, Budapest, Hungary
 JIŘÍK Jaroslav, Charles University, Prague, Czech Republic
 LANKTON James, UCL Doha, Qatar
 MARGHITU Rodica, National History Museum of Romania, Bucarest, Romania
 MATHIS François, Direction de l'archéologie, service public de Wallonie, Belgique
 PACHECO Claire, Centre de Recherche et de Restauration des Musées de France, Paris, France
 PION Constantin, Royal Institute for Cultural Heritage, Brussels, Belgium
 QUAST Dieter, Römisch-Germanisches Zentralmuseum Mainz (RGZM), Mainz, Germany
 RIFA - ABOU EL NIL Patricia, CEALex, CNRS-USR 3134, Alexandria, Egypt
 SETHURAMAN Suresh, Indian National Trust for Art and Cultural Heritage (INTACH), Chennai, India
 SCHMETZER Karl, Deutsche Patent- und Markenamt, Petershausen, Germany
 ŠMIT Žiga, Lubljana University, Lubljana, Slovenia
 SOULAT Jean, LANDARC, Fleurance, France
 VILLELA-PETIT Inès, Cabinet des Médailles de la Bibliothèque Nationale, Paris, France
 WILLEMSEN Annemarieke, National Museum of Antiquities, Leiden, The Netherlands

Friday June 23 2017

Palissy auditorium - C2RMF
Topic : Trade between Indian and Western worlds in the Early Middle Ages

- 15:40 **H. A. Gilg** - Ancient garnet sources and their evolution in time: what know and what we don't know
- 16:20 Round table discussions
Synthesis
Perspectives
Publication
- 17:00 General Conclusion
- 17:20 **I. Pallot-Frossard** – closing address

Thomas CALLIGARO et **Patrick PERIN** chairs (C2RMF)
Catherine LOUBOUTIN, deputy director, in charge of scientific policy (MAN)