

# PAPER HISTORY

Journal of the  
International Association of Paper Historians

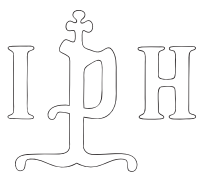
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International Association of Paper Historians  
 Internationale Arbeitsgemeinschaft der Papierhistoriker  
 Association Internationale des Historiens du Papier



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## Letter of the President May 2014

Dear members of IPH

2014 is a year of paper historical importance, where FABRIANO paper celebrates its 750<sup>th</sup> anniversary of paper production in Italy, the 32<sup>nd</sup> IPH Congress takes place in Fabriano and Amalfi, and the International Dunhuang Project IDP is celebrating its 20<sup>th</sup> anniversary of Silk Road paper research with a series of events and activities in London.

Many activities have taken place in the planning of the 32<sup>nd</sup> IPH Congress 2014 in Italy since the Call for papers was published in October 2013. The authors are now concentrated on making their final manuscripts ready for the presentation in Fabriano and Amalfi within a few months in September 2014. The Congress Organization in Fabriano presents all news about the 32<sup>nd</sup> IPH Congress in this issue of IPH Paper History including the programme draft, registration scheme, suggestions for hotel accommodation, congress fee, and travel information. Further news will be available during the summer on the IPH web-site.

Recently an updated version of the IPH Membership list has been made in order to create an inspiring network between all new and old IPH members and thus make it easier nationally and internationally to get in touch with each other. Before the final printing takes place, however, the list will be distributed either electronically or by post to all members for eventual corrections. It is my hope that the new Membership list will result in increased individual cooperation within the various fields of paper historical research similar to the new 2-years project "Development of a protocol for identification of Asian papers in order to locate its provenance and time of production". The project is funded by Paris 1 University, Sorbonne and organized by Claude Laroque, Senior lecture at Paris 1 University.

The IPH Congress 2012 in the Upper Rhine Region was the last congress, where Alphonse Radermecker participated together with his wife Angelika Radermecker. A few months ago, on the last day of January, our Honourable member of IPH died. On behalf of IPH, I have tried in the obituary to express our deepest gratitude for Alphonse Radermecker's valuable contribution for many years to IPH.

Anna-Grethe Rischel

## Brief der IPH-Präsidentin, Mai 2014

Liebe IPH-Mitglieder

2014 ist für die Papiergeschichte ein Jahr besonderer Bedeutung. Fabriano feiert den 750. Jahrestag des Beginns seiner Papierproduktion in Italien, und der 32. IPH-Kongress wird in Fabriano und Amalfi tagen. Auch das internationale Dunhuang-Projekt IDP feiert 20 Jahre der Papiergeschichtsforschung entlang der Seidenstraße mit einer Reihe von Veranstaltungen in London.

Seit der Veröffentlichung des Aufrufs zur Einreichung von Referaten zum 32. IPH-Kongress in Italien ist eine rege Tätigkeit zu verzeichnen. Die Autoren bereiten nun die Endfassung ihrer Vorträge für die Präsentation in Fabriano und Amalfi (September 2014) vor, und die Kongressleitung in Fabriano veröffentlicht in dieser Ausgabe von IPH Paper History alles Wissenswerte über den Kongress (Programm,

Anmeldung, Vorschläge für die Wahl der Unterkunft, Kongressgebühr, Reise-Informationen). Weitere Mitteilungen folgen im Sommer 2014, einzusehen auf der IPH Homepage.

Kürzlich ist eine auf den neuesten Stand gebrachte Version des IPH-Mitgliederverzeichnisses erstellt worden mit dem Ziel, alte und neue Mitglieder in einem anregenden Netzwerk zu vereinen und den nationalen und internationalen Gedankenaustausch zu erleichtern. Vor der Drucklegung wird das Verzeichnis allen Mitgliedern elektronisch oder per Post zu Einsicht zugestellt, damit allfällige Korrekturen berücksichtigt werden können. Ich hoffe, dass das neue Verzeichnis zu verstärkter, direkter Zusammenarbeit der Spezialisten führen wird, ähnlich dem neuen Zweijahres-Projekt „Entwicklung eines Schemas zur Identifikation von Papieren aus Asien zwecks Bestimmung von Produktionsort und -Zeit“. In diesem Projekt federführend ist die Universität Paris 1 (Sorbonne) unter der Leitung von Frau Claude Laroque.

Der IPH-Kongress 2012 in der Region Oberrhein war der letzte Kongress, an dem Alphonse Radermecker mit seiner Gattin Angelika teilnehmen durften. Vor wenigen Monaten, am letzten Januar-Tag, ist unser Ehrenmitglied von uns gegangen. Im Namen der IPH habe ich der tiefen Dankbarkeit unserer

Arbeitsgemeinschaft für seine langjährige, tatkräftige Unterstützung in einem Nachruf Ausdruck gegeben.

Anna-Grethe Rischel

## Lettre de la présidente de l'IPH – may 2014

Chers Membres de l'IPH

2014 est une année importante pour l'histoire du papier, tout d'abord car le papier de Fabriano célèbre ses 750 ans de fabrication en Italie tandis que le 32ème congrès de l'IPH se tiendra à Fabriano et Amalfi, et par ailleurs car le Projet International Dunhuang (IDP) célèbre quant à lui le 20 ème anniversaire de la recherche sur la Route de la Soie, avec une série d'événements et d'activités à Londres.

Les choses ont bien avancé dans la programmation du 32ème congrès de l'IPH 2014 depuis la publication de l'appel à contributions en octobre 2013. Les intervenants préparent la version finale de leurs exposés à Fabriano et Amalfi, afin d'être prêts à les présenter dans quelques mois, en septembre prochain. Le Comité d'organisation du Congrès donne toutes les nouvelles concernant le 32ème Congrès IPH dans le présent numéro de IPH Paper History, y compris une première ébauche du programme, les éléments nécessaires à l'inscription, des suggestions pour l'hébergement en hôtels, le montant de l'inscription, ainsi que des informations sur le trajet. De plus amples détails seront disponibles au cours de l'été sur le site Internet de l'IPH.

Une mise à jour de la liste des membres de l'IPH a été effectuée, afin de créer un réseau actif entre les anciens et nouveaux membres de l'IPH, ce qui facilitera les prises de contact entre nous, au niveau national et international. Avant d'imprimer cette version mise à jour, la liste sera communiquée (par voie électronique ou postale) à tous les membres en vue d'éventuelles corrections. J'ai l'espoir que cette nouvelle liste des membres aura pour effet de stimuler la coopération individuelle dans les divers domaines de la recherche historique consacrée au papier, à l'instar du nouveau projet de 2 ans « Développement d'un protocole d'identification des papiers d'Asie en vue de déterminer sa provenance et sa période de fabrication. » Ce projet est financé par l'Université Paris 1-Sorbonne et organisé par Claude Laroque, enseignante à l'Université Paris 1.

Le Congrès IPH 2012 dans la région du Rhin Supérieur fut le dernier auquel participa Alphonse Radermecker, accompagné de sa femme Angelika Radermecker. Notre membre d'Honneur de l'IPH est mort le dernier jour de janvier. Au nom de l'IPH, j'ai tenté d'exprimer dans un dernier hommage notre très profonde gratitude pour la remarquable contribution qu'Alphonse Radermecker a, pendant de nombreuses années, apportée à l'IPH.

Anna-Grethe Rischel

## IPH Membership fee 2014-2016

### Reminder / *Rappel* / Mahnung

Please note the letter with the invoice for the biennial IPH membership fee that you have received. Remember to pay your fee - € 70 for individual members and € 100 for institutions, because our non-profit IPH association can function efficiently only with the financial, intellectual, practical and voluntary support from you and from as many friends of paper and paper history as possible.

## Alphonse Radermecker

1939 - 2014

### Obituary

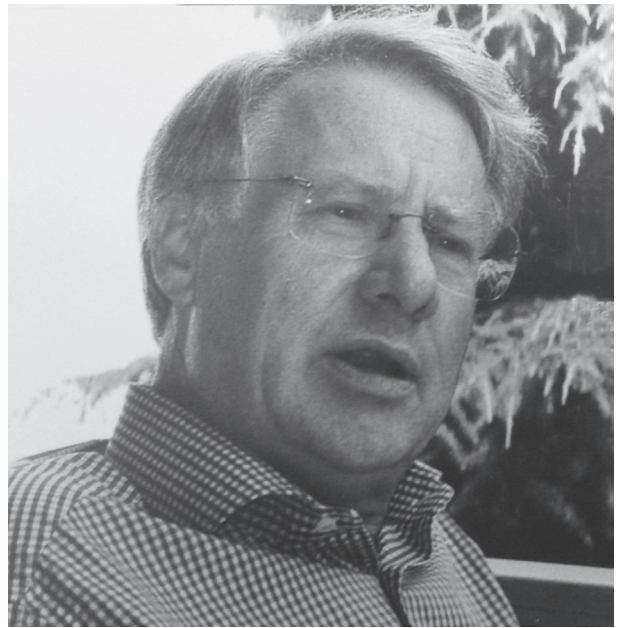
Alphonse Radermecker and I had met each other at the IPH congresses 1994 in Annonay and 2004 in Duszynki Zdrój, but our personal friendship did not start until June 2007.

That year Göran Wohlfahrt and I participated as congress coordinators in our first IPH Council meeting in order to present the programme of the IPH Congress 2008 in Stockholm and Uppsala. The meeting took place in Eupen at the hospital home of Alphonse and Angelika Radermecker, where the impressive collection of books and IPH publications clearly illustrated his deep interest in the history of paper and his many years of dedication to IPH. Four years later the last Council meeting in Eupen took place in 2011, and he gave me one of his rare books – the Catalogue of American Watermarks 1690-1835 as a remembrance of our meetings in Eupen and of the interest that we shared for paper historical publications.

With special interest in the regional history of Belgian paper production and especially of the region of Malmédy, it was most natural that Alphonse Radermecker became the editor of the IPH Yearbook 1990, Volume 8 of the International IPH Congress in Malmédy. Here he presented his paper with the title “Die Wasserversorgung der “Papeterie de Malmédy SPRL”.”

In 2004 Alphonse Radermecker was elected as new treasurer at the IPH Congress in Poland and continued until his retirement in 2012, where he together with his dear wife Angelika participated in the 2012 IPH Congress in the Upper Rhine Region – his last IPH Congress.

Many dear and valuable memories of Alphonse Radermecker are preserved in my correspondence and phone calls with him, full of constructive discussions and his good advice. This “long distance” friendship, which I remember with



deep gratitude, started in the summer 2007, where Alphonse Radermecker convinced me through long phone calls to accept to be proposed as president of IPH at the General Meeting 2008 in Stockholm. Some years earlier, had our Honorary President of IPH, Mr. Henk Voorn, in a similar way advised and convinced him as new treasurer to be the successor of our Honourable Member of IPH, Ludwig Ritterpusch.

From his personal experience, Alphonse Radermecker therefore knew the importance of being introduced and guided in the best possible way into the administration of IPH. In October 2007 I received a small, handwritten note, where he suggested that we met each other sometimes before February 2008, and in the meantime kept in touch per E-mail, post or phone. In that way our friendship started and continued until his death.

Alphonse Radermecker's struggle against serious illness finally ended 31/1 2014 with the death of our dear Honourable Member of IPH. Being together with people that shared a common relation and interest was most precious and valuable for Alphonse Radermecker, and that was what he found in IPH, what is still there and what we learned in our contact with him.

Anna-Grethe Rischel

## IPH General Meeting, Fabriano (Italy)

### *IPH Assemblée générale, Fabriano (Italie)*

### IPH Generalversammlung, Fabriano (Italien)

21.9.2014, 17:30

Information about time and place of the General Meeting is published in the periodical “IPH Paper History”, Volume 18, Year 2014, Issue 1/

*Les informations concernant l'heure et le lieu de l'Assemblée générale sont publiées dans la revue «IPH Paper History», vol. 18, année 2014, Numéro 1/*

Die Information über Ort und Zeit der Generalversammlung ist in der Zeitschrift „IPH Paper History“, Band 18, 2014, Nummer 1, veröffentlicht worden/

### Agenda/agenda/ Tagesordnung

(1)

Welcome, communications by the President, ascertain of quorum, designation of tellers and chairperson of the meeting/

*Mot de bienvenue, communication de la Présidente, vérification du quorum, désignation des scrutateurs et du/de la «président-e de séance»/*  
Begrüßung, Mitteilungen der Präsidentin, Feststellung der Beschlussfähigkeit, Bestimmung der Stimmzähler und Sitzungsleiter/

(2)

Report of the General Meeting 2012, Beuggen/  
*Rapport de l'Assemblée générale 2012, Beuggen/*  
Protokoll der Generalversammlung 2012, Beuggen/  
(cf. IPH Congress Book 19/2012, pp 209-221)

(3)

Evolution of membership; approval of new members/  
*Évolution du nombre des membres; approbation des nouveaux membres/*  
Entwicklung der Mitgliederzahl; Gutheißung von neuen Mitgliedern/

(4)

President's biennial report: Activities since the GM 2012/  
*Rapport bis-annuel de la Présidente: activités depuis l'AG 2012/*  
Zweijahres Bericht der Präsidentin: Aktivitäten seit der GV 2012/

(5)

Accounts for 2012 and 2013/  
*Comptes de 2012 et 2013/*  
Jahresrechnungen 2012 und 2013/

(6)

Auditors' report on the accounts 2012 and 2013/  
*Rapport des auditeurs concernant les comptes de 2012 et 2013/*  
Bericht der Kassenprüfer für 2012 und 2013/

(7)

Voting on points 3 to 6 (approval/ discharge of the Council)/  
*Vote des points 3 à 6 (approbation/ décharge du Conseil)/*  
Abstimmung über die Punkte 3 bis 6  
(Genehmigung/ Entlastung des Vorstands)/

(8)

Elections/  
*Elections/*  
Wahlen/

(8.1)

Re-election of President & Vice-President/  
*Re-élection de la Présidente & du Vice-président /*  
Wiederwahl von Präsidentin & Vize-Präsident/  
Re-election of Treasurer/  
*Re-élection du Trésorier/*  
Wiederwahl des Schatzmeisters/



(8.2)

Election of the secretary/

*Élection de la secrétaire/*

Wahl der Sekretärin

Proposed/ *proposition/* Vorschlag:*Magdalene Christ*

President's report, the accounts for 2012/2013 and the budget proposals for 2014/2015 will be published in the Issue 2, Vol. 18, Year 2014 of the periodical "IPH Paper History".

Any other proposals, also for candidates, have to be addressed by mail to the President by August 15th, 2014.

(8.3)

Re-election of the auditors/

*Re-élection des auditeurs/*

Wiederwahl der Kassenprüfer/

*Le compte rendu de la Présidente et les comptes des années 2012/2013 ainsi que les chiffres des budgets 2014/2015 seront publiés dans le numéro 2, vol 18, de l'année 2014 du périodique « IPH Paper History ».*

(8.4)

Re-election of the Council (assessors)/

*Re-élection du Conseil (assesseurs)/*

Wiederwahl des Vorstands (Beisitzer)/

*D'autres propositions et les nominations de candidats émanant des membres d'IPH sont à adresser à la Présidente par voie postale de correspondance avant le 15 août 2014.*

(9)

Budgets 2014 and 2015, membership fee/

*Budgets 2014 et 2015, cotisations/*

Finanzpläne für 2014 und 2015, Mitgliedsbeitrag/

(10)

Future activities, (Congresses; other items)/

*Activités futures, (congrès et autres)/*

Zukünftige Aktivitäten, (Kongresse; andere

Themen)/

Der Bericht der Präsidentin, die Jahresrechnungen 2012/2013 und die Budgetpläne 2014/2015 werden in Nr. 2, Vol. 18, 2014 der Zeitschrift „IPH Paper History“ veröffentlicht.

(11)

Miscellaneous, including questions, ideas and comments from members/

*Divers, y compris les questions, les idées et les commentaires des Membres/*

Varia, einschließlich Fragen, Ideen und

Kommentare der Mitglieder/

Weitere Anträge zur Tagesordnung sowie Wahlvorschläge sind der Präsidentin bis zum 15. August 2014 schriftlich mitzuteilen.

(12)

Closing of the ordinary General Meeting by the President/

*Clôture de la séance par la Présidente/*

Schluss der Generalversammlung durch die Präsidentin/



## XXXIInd IPH CONGRESS 2014

### *XXXIe Congrès IPH 2014*

### XXXII. IPH-Kongress 2014

#### Fabriano, Amalfi

Sunday, 21 September till Friday, 26 September 2014

*Dimanche 21 septembre au vendredi 26 septembre 2014*

Sonntag, 21. September bis Freitag, 26. September 2014

#### Welcome to Fabriano and Amalfi

Headings:

Paper as an object of trade, Watermarks,

The paper: a medium without boundaries.

#### Soyez les bienvenus à Fabriano et à Amalfi

*Sujets principaux:*

*Le papier comme un objet de commerce, Filigranes,*

*Le papier: un milieu sans frontières*

#### Willkommen in Fabriano und Amalfi

Hauptthemen:

Das Papier als Objekt des Handels, Wasserzeichen,

Das Papier: ein Mittel ohne Grenzen

#### Congress Centre:

Fabriano, The Paper and Watermark Museum

Amalfi, Museum of the Compass and the Duchy of Amalfi

#### Centre du Congrès:

*Fabriano, Musée du papier et du filigrane*

*Amalfi, Musée de la boussole et le Duché d'Amalfi*

#### Kongresszentrum:

Fabriano, Museum für Papier und Wasserzeichen

Amalfi, Museum der Kompass und das Herzogtum Amalfi



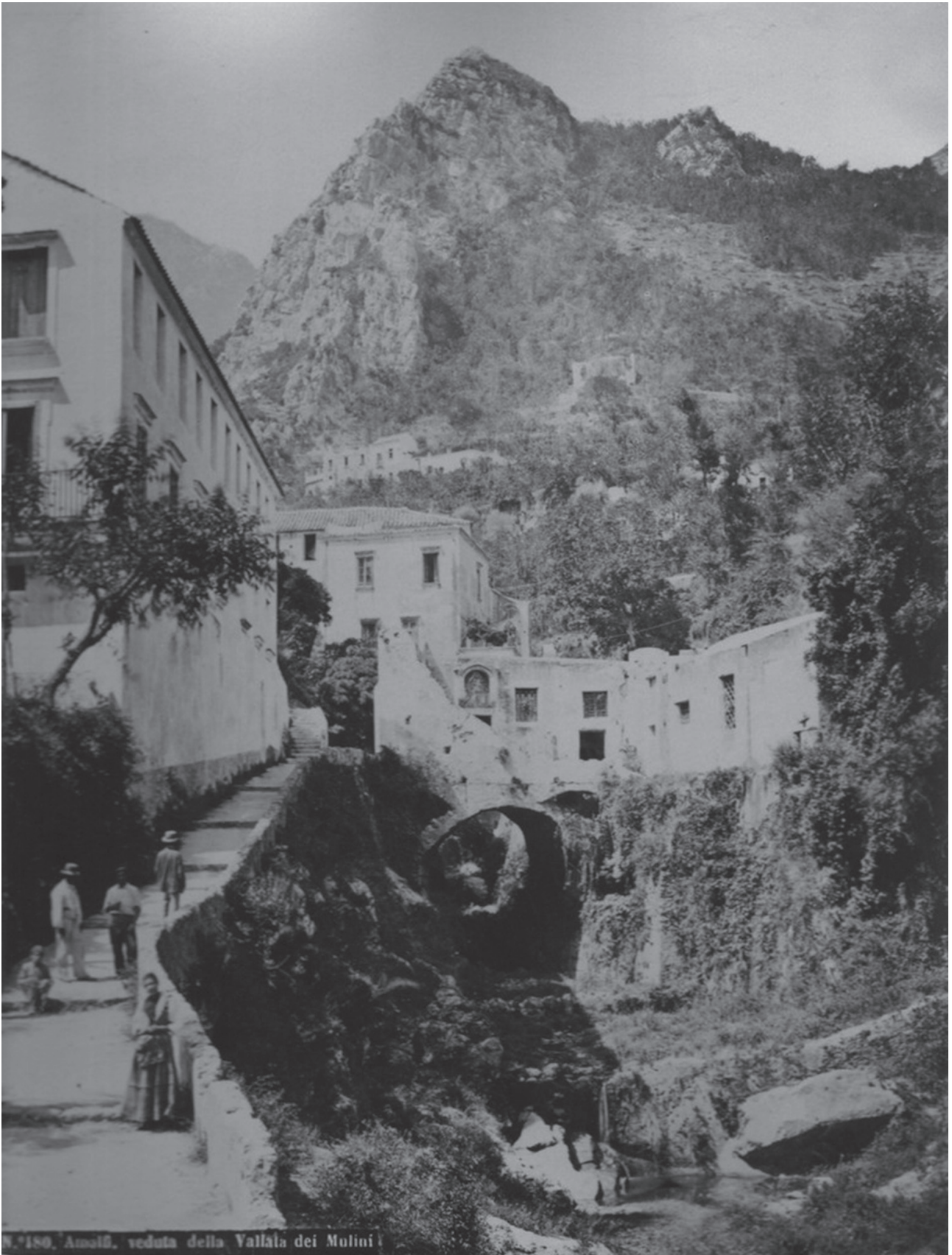


Photo: Amalfi The mill's valley (1889) Rive, Roberto (18.-1889)-n.180 Amalfi-Veduta della Vallata dei Mulini

## 32nd IPH Congress, 2014: General Programme

### *32e Congrès IPH, 2014: Programme générale*

### 32. IPH-Kongress 2014: Programmübersicht

21.09.2014 (Sunday / *dimanche* / Sonntag):

Fabriano, The Paper and Watermark Museum

*Fabriano, Musée du papier et du filigrane*

Fabriano, Museum für Papier und Wasserzeichen

after / à partir de / nach 15:00:

arrival & registration

*arrivée & enregistrement*

Ankunft & Anmeldung

17:30 IPH General Meeting

*IPH Assemblée générale*

IPH-Generalversammlung

19:00 Opening of the exhibition "Time before the end"

The Chronicle of Nuremberg (Hartmann Schedel, 1440-1514)

Museum of the National Library of Spain

*Ouverture de l'exposition "Le temps avant la fin"*

*La Chronique de Nuremberg (Hartmann Schedel, 1440-1514)*

*Musée de la Bibliothèque nationale d'Espagne*

Eröffnung der Ausstellung "Die Zeit vor dem Ende"

Die Nürnberger Chronik (Hartmann Schedel, 1440-1514)

Museum der Nationalbibliothek von Spanien

Dinner/ *Dîner*/ Abendessen

22.09.2014 (Monday / *lundi* / Montag):

Fabriano, The Paper and Watermark Museum

*Fabriano, Musée du papier et du filigrane*

Fabriano, Museum für Papier und Wasserzeichen

09:00 Opening of the 32nd IPH Congress; lectures

*ouverture du 32e Congrès IPH; conférences*

Eröffnung des 32. IPH Kongresses; Vorträge

Lunch / *déjeuner* / Mittagessen

Afternoon / *après-midi* / Nachmittag:

Lectures, *conferences*, Vorträge

Evening / *soirée* / Abends:

Dinner/ *Dîner*/ Abendessen

Academy of musicians / *Académie des musiciens* / Akademie der Musiker

Concert / *concert* / Konzert

## 23.09.2014 (Tuesday / *mardi* / Dienstag):

### Camerino, The Ducal Palace / *Palais ducal* / der herzoglichen Palast

Morning / *Matinée* / Morgen:

Guest of Fondazione Fedrigoni ISTOCARTA

*Invité par la Fondazione Fedrigoni ISTOCARTA*

Gäste der Stiftung Fedrigoni ISTOCARTA

“At the origins of western paper: techniques, production, markets (XIII-XV c.)”

*aux origines de papier occidental: techniques, production, les débouchés (XIII-XV s.)*

Auf die Ursprünge des westlichen Papiers: Technik, Produktion, Märkte (XIII-XV J.)

Lunch / *déjeuner* / Mittagessen

### Fabriano, The Paper and Watermark Museum

*Fabriano, Musée du papier et du filigrane*

Fabriano, Museum für Papier und Wasserzeichen

Afternoon / *après-midi* / Nachmittag:

Lectures / *conferences* / Vorträge

18:00 Visit to the exhibition “From Giotto to Gentile”

*Visite de l'exposition “De Giotto à Gentile”*

Besuch der Ausstellung “von Giotto bis Gentile”

20:00 Farewell dinner / *Dîner d'adieu* / Abschiedsessen

Greetings from the Mayor of Fabriano

*Salutations du maire de Fabriano*

Grüße aus dem Bürgermeister von Fabriano

## 24.09.2014 (Wednesday / *mercredi* / Mittwoch):

8:00 Departure to Ascoli Piceno; visit to the Papal Papermill (XVI c.) and to the old center of Ascoli; departure to Amalfi; arrival and check-in at hotel

*Départ pour Ascoli; visite du Papeterie du Pape (XVI s.) et du centre historique d'Ascoli;*

*départ à Amalfi, arrivée et installation à l'hôtel.*

Abfahrt nach Ascoli Piceno; Besuch des Papstes Papierfabrik (XVI J.) und der Altstadt von Ascoli;

Abfahrt nach Amalfi; Ankunft und Check-in im Hotel.

## 25.09.2014 (Thursday / *jeudi* / Donnerstag):

### Amalfi, Museum of the Compass and the Duchy of Amalfi

*Amalfi, Musée de la boussole et le Duché d'Amalfi*

Amalfi, Museum der Kompass und das Herzogtum Amalfi

Morning / *matinée* / Morgen:

Lectures, *conferences*, Vorträge

Lunch / *déjeuner* / Mittagessen

Afternoon / *après-midi* / Nachmittag:

Lectures, *conferences*, Vorträge

Visit to the Museum of the Compass and the Duchy of Amalfi

*Visite du Musée de la boussole et le Duché d'Amalfi*

Besichtigung der Museum der Kompass und das Herzogtum Amalfi

Dinner/ *Dîner*/ Abendessen

## 26.09.2014 (Friday / *vendredi* / Freitag):

Amalfi, Museum of the Compass and the Duchy of Amalfi  
*Amalfi, Musée de la boussole et le Duché d'Amalfi*  
 Amalfi, Museum der Kompass und das Herzogtum Amalfi

Morning / *matinée* / Morgen:

Lectures / *conferences* / Vorträge

Afternoon / *après-midi* / Nachmittag:

Lectures, *conferences*, Vorträge

Closure of the 32nd IPH Congress

*Clôture du 32e Congrès IPH*

Abschluss des 32. IPH Kongresses

18:00 Walk in Amalfi / *promenade à Amalfi* / spazieren in Amalfi

20:00 Farewell dinner / *Dîner d'adieu* / Abschiedsessen

Greetings from the Mayor of Amalfi

*Salutations du maire de Amalfi*

Grüße aus dem Bürgermeister von Amalfi

## 27.09.2014 (Saturday / *samedi* / Samstag):

> 9.00 Departure to Naples (Airport / Railway Station)

*Départ pour Naples (Aéroport / Gare)*

Abreise nach Neapel (Flughafen / Bahnhof)

The organizers reserve the right to make changes of the programme in case of unexpected events.

*Les organisateurs se réservent le droit de modifier le programme pour des raisons indépendantes de leur volonté.*

Die Organisatoren behalten sich Programmänderungen infolge unerwarteter Ereignisse vor.



## The Congress of 2014 promises to be important for at least two reasons:

The first reason is that the Congress will be held in the two Italian cities Fabriano and Amalfi, so different from each other, but important for the history of paper. The first one is located in a valley between the Apennine Mountains, the second one overlooking the Tyrrhenian Sea.

Both cities have a history illustrating their growth in the Middle Ages - Fabriano for its craftsmen of iron, wool and, of course, of paper - and Amalfi, because it together with Genoa, Pisa and Venice was one of the four Maritime Republics, and saw a business in paper production, thanks to its trade with the Arab world.

The second reason is that this year is the 50th anniversary of the death of Andrea F. Gasparinetti, the most active Italian scholar, and one of the promoters of the IPH, as we all know that he was.

So we hope that you will allow us to dedicate this Congress to his memory.

According to the programme of speakers, we'll have presentations on different topics that are not always in line with the given suggestions. We personally believe that this is not so important, because the variety demonstrates the many facets of the research in progress, such as the study and application of watermarks, and the methods proposed to classify them. Another rather interesting line of research is the one concerning the trade of paper - a survey conducted by comparing the watermarks.

It is pleasing to note that the abstracts were received from Canada to Japan, from Russia to Portugal, thus demonstrating a widespread interest in the history of paper.

See at a glance the topics that will be discussed:

We wish to start with three "Italian" speeches, as we feel that they are important, because they concern



*Photo: Fabriano landscape*



*Photo: Amalfi View from the sea*

the creation of a database of Italian watermarks that will include the Corpus Chartarum italicarum, the “smaller” Zonghi’s Collection and the Gasparinetti’s Collection, for a total of about 5000 watermarks. Speeches will be given by M. C. Misiti (ICPAL), A. Fucini (ICPAL) and L. Teodonio (CNR).

And on the classification of watermarks we will furthermore listen to the lectures of M. Hidalgo Brinquis, M. D. Diaz De Miranda and the young scholar C. Valero.

The trade and the roads of paper and rags will be addressed by K. Toia, C. Bustarret, M. Biddle, P. Engel, M. Carreira, C. Gendron, F. Schmidt, and M. Stiegler.

The Asian continent will be investigated by C. Laroque, K. Enami and T. Fakhriati. When we are the guests of Fondazione Fedrigoni-ISTOCARTA in Camerino, S. Roger Albrow will speak about the evolution of paper manufacture in Fabriano and in its surroundings.

A session will be devoted to Russian paper by E. Mikolaychuk, E. Oukhanova and A. Balachenkova.

Amalfi will be treated by A. Tajani, Delgado and Gargano.

And last, but not least, the speeches will be presented by A. G. Rischel (Danish paper production in the Renaissance), N. Scianna (type of countermarks from Ravenna), B. Dufournier (French paper mills), A. J. Marques) a study on sacred music supported by paper and watermarks), M. C. Sistach (Spanish-Arabian paper compared with the Italian one), C. Wagner (watermarks in German incunabula), F. Figueira (an ivory cross and its history through the paper observation), and M. Fürbach (watermarks of fake English bank notes).

We hope that your stay in Italy will be pleasant.

Fabriano is an old town, located in the Apennines and its origins date back to Roman times, but it became important only in the Middle Ages, thanks to the innovations that Fabriano papermakers introduced the manufacture of paper. In a few years the Fabriano paper became famous in all the markets for its quality. We do not know the people that brought the art of papermaking in Fabriano, but it is reasonable to assume that they were the local





*Photo: Fabriano Town-square*

merchants who were connected to the trade network of Central-Northern Italy. The documents testify a paper production since the second half of the XIII century, but it certainly dates back several years before, at least to the first half of the century.

The conferences in Fabriano will take place in two different locations: at the Paper and Watermark Museum (Convent of St. Dominic) and at the Convent of St. Benedict, two buildings of the Benedictine Order (XIV – XV c.).

At the end of the proceedings we'll take a walk in the historic center of Fabriano and we'll have the opportunity attending a concert at the Music Academy with music played on historical pianos: you will be pleased to hear the original sound of the music of Bach, Mozart and Beethoven.

In the second evening we visit the art exhibition "From Giotto to Gentile". The Civic Art Gallery in Fabriano retains a number of works covering the period from the painting of Giotto to that of Gentile



*Photo: Fabriano the Paper Museum*





*Photo: Ascoli – The Papal Papermill*

da Fabriano. It is a testimony of great artistic value, because it explains the change of style in the Italian painting between the XIV and XV centuries.

On September 24, we'll move to Amalfi, with a stop in Ascoli Piceno to visit the paper mill that was built by order of the Pope Giulio II Della Rovere (the pope of Raffaello and Michelangelo). Then we'll take a walk in the center of Ascoli, a medieval town, famous for its large and wonderful square, certainly one of the most beautiful in Italy.

Amalfi is one of the four Maritime Republics, first mentioned in the VI century and soon afterwards Amalfi acquired importance as a maritime power, trading grain, salt and slaves. The "Amalfi tables" (Tavole amalfitane) provided a maritime code that was widely used by the Christian port cities. Merchants of Amalfi were using gold coins to purchase land in the 9th century, while most of Italy worked in a barter economy. In the VIII and IX century, when Mediterranean trade revived, Amalfi and Gaeta shared the Italian trade with the East, while Venice was in its infancy, and in 848 its fleet went to the assistance of Pope Leo IV against the Saracens.

As an independent republic from the 7th century until 1075, Amalfi extracted itself from Byzantine vassalage in 839 and first elected a duke in 958; it rivaled Pisa and Genoa in its domestic prosperity and maritime importance before the rise of Venice. In medieval culture Amalfi was famous for its flourishing schools of law and mathematics. Flavio Gioia, traditionally considered the first to introduce the mariner compass to Europe, is said to have been a native of Amalfi. The Museum of Handmade Paper celebrates the long-established paper manufacturing history of Amalfi. Amalfi was one of the first centers of papermaking in Europe, the skill having been acquired by the Amalfitans from the Arabs. The museum is housed in an old paper mill once owned by the Milano family.

## Accommodation / Hôtels / Hotel

### FABRIANO

Relais Marchese del Grillo \*\*\*\*  
(20 rooms - 7.3 km)  
Loc. Rocchetta Bassa, 73  
Fabriano  
tel. +39 0732 625690  
info@marchesedelgrillo.com  
http://www.marchesedelgrillo.com

Residenza La Ceramica \*\*\*\*  
(10 rooms - 0,5 km)  
Via della Ceramica, 10  
Fabriano  
tel. +39 0732 4136  
info@residenzalaceramica.com  
http://www.residenzalaceramica.com

Hotel Gentile \*\*\*\*  
(138 rooms - 3,4 km)  
Via G. Di Vittorio, 13  
Fabriano  
tel. + 39 0732 627190  
info@hotelgentile.it  
http://www.hotelgentile.it

Hotel Janus \*\*\*\*  
(77 rooms - 0,65 km)  
P.le Matteotti, 45  
Fabriano  
tel. + 39 0732 4191  
info@hoteljanus.it  
http://www.hoteljanus.it

Hotel 2000 \*\*\*  
(10 rooms - 0,75 km)  
Viale Zonghi, 29  
Fabriano  
tel. +39 0732 251160  
info@2000hotel.it  
http://www.2000hotel.it

B&B La Portella  
(3 rooms - 0,12 km)  
Via Damiano Chiesa, 16  
Fabriano  
tel. + 39 0732 4983  
info@beblaportella.it  
http://www.beblaportella.it

B&B La Porta del Piano  
(3 rooms - 0,25 km)  
Via G.Miliani, 3  
Fabriano  
tel. +39 333.3896063  
info@bbportadelpiano.it  
http://www.bbportadelpiano.it

More: hotels/B&B  
info: http://fabrianoturismo.it/catalogo/default.asp

### AMALFI

From 24 to 27 September 2014

Hotel La Bussola \*\*\*\* (70 rooms)  
Lungomare dei Cavalieri, 16 – Amalfi  
tel. +39 089 871533  
info@labussolahotel.it  
http://www.labussolahotel.it  
*Prices from 190 € to 270 €, including breakfast*

Hotel Centrale Amalfi \*\*\* (17 rooms)  
Largo Piccolomini, 1 – Amalfi  
tel. +39 089 872608  
info@amalfihotelcentrale.it  
http://www.amalfihotelcentrale.it  
*Prices from 70 € to 90 €, including breakfast*

Hotel Lidomare \*\*\* (18 rooms)  
Largo Piccolomini, 9 – Amalfi  
tel. +39 089871332  
info@lidomare.it  
http://www.lidomare.it  
*Prices from 65 € to 145 €, including breakfast*

Hotel Floridiana \*\*\* (18 rooms)  
Salita Brancia, 1 – Amalfi  
tel. +39 0898736373  
info@hotelfloridiana.it  
http://www.hotelfloridiana.it  
*Prices from 110 € to 150 €, including breakfast*

## Congress fee 2014 / *Contribution 2014* / Kongressgebühr 2014

IPH members, speakers <i>Membres IPH, conférenciers</i> IPH-Mitglieder, Vortragende	360 €
Members of other associations of paper historians; attendants 370 € <i>Membre d'une autre association d'historiens du papier;</i> <i>personnes accompagnantes</i> Mitglieder einer anderen papierhistorischen Vereinigung; Begleitpersonen	
Students <i>Étudiants</i> Studierende	250 €
Other participants <i>Autres participants</i> Andere Teilnehmer	400 €

The congress fee does not include the costs of travel to Fabriano and from Amalfi, and of accommodation (incl. breakfast). It includes lectures, preprints, the Congress Book, meals (coffee break, tea break, lunch, dinner, official dinner) & bus between Fabriano and Amalfi. Attendants may participate in the full program.

*Les frais de voyage à Fabriano et de Amalfi et de logement (y compris le petit déjeuner) sont à la charge des participants. Les contributions comprennent : conférences, résumés, les Actes du Congrès, collations (café, thé, déjeuners, dîners, banquet) & transport en autobus Fabriano - Amalfi. Les personnes accompagnantes sont admises au programme complet.*

Die Reisekosten zu Fabriano und von Amalfi sowie die Kosten der Unterkunft (mit Frühstück) sind in der Kongressgebühr nicht inbegriffen. Die Kongressgebühr umfasst: Vorträge, Vortrags-Zusammenfassungen, Kongressbuch, Verpflegung (Kaffee, Tee, Mittagstisch, Abendessen, Bankett) & Bus-Transport Fabriano - Amalfi. Begleitpersonen können am gesamten Programm teilnehmen.

The Congress fee must be paid before July 21st 2014. After this date, there will be a 10% additional registration charge.

*Date limite d'inscription: 21 juillet 2014. Après cette date les inscriptions seront majorées de 10%.*

Die Kongressgebühr muss bis zum 21. Juli 2014 eingegangen sein. Danach wird ein Zuschlag in Höhe von 10% fällig.



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*Je désire m'inscrire au 32e Congrès IPH*  
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IPH member/ *Membre IPH* / IPH Mitglied: yes/*oui*/Ja ☐

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Speaker/ *Conférencier*/ Vortragender: yes/*oui*/Ja ☐

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Title/ *Titre de l'intervention*/ Titel des Vortrags:

Member of / *membre de* / Mitglied von:

I will be accompanied by (Name, first Name)/

*Je serais accompagné par (nom, prénom)/*

Ich werde begleitet von (Name, Vorname):

Student/ *Etudiant(e)* /Student/in : yes/*oui*/Ja ☐

**Practicalities/ Informations / Information**

Arrival date/ *Date d'arrivée*/ Ankunftstag:

Departure date/ *Date de départ*/ Abreisetag:

Special diet/ *régime alimentaire particulier*/ yes/oui/Ja ☐  
Specielle Diät:

**Date/ *Date*/ Datum:**
**Signature/ *Signature*/ Unterschrift:**
**IMPORTANT/ IMPORTANT/ WICHTIG**

Please complete this registration form and send it as soon as possible and not later than July 21st 2014 by regular mail to Franco Mariani, Via M. Bellocchi, 20 , I- 60044 FABRIANO (AN), ITALY or by e-mail to:

[iph2014fabriano@gmail.com](mailto:iph2014fabriano@gmail.com)

Your registration will be effective only after reception of your payment of congress fee transferred to the CISSCA banking account. Please include your name, any accompanying person, and how many persons you are paying for with your bank transfer.

*Merci de compléter ce bulletin d'inscription et de l'envoyer le plus rapidement possible, au plus tard le 21 juillet 2014 par courrier postal à: Franco Mariani, Via M. Bellocchi, 20 , I- 60044 FABRIANO (AN), ITALIE ou par e-mail : [iph2014fabriano@gmail.com](mailto:iph2014fabriano@gmail.com)*

*Votre inscription ne prendra effet qu'à réception du paiement par virement bancaire sur le compte de CISSCA. Lors du virement, merci de bien préciser votre nom et celui de la personne qui vous accompagne et pour combien de personnes vous payez.*

Bitte füllen Sie dieses Anmeldeformular aus und schicken es so schnell wie möglich, spätestens aber bis zum 17. Juli 2014 als Brief an: Franco Mariani, Via M. Bellocchi, 20 , I- 60044 FABRIANO (AN), ITALY oder mittels E-Mail an: [iph2014fabriano@gmail.com](mailto:iph2014fabriano@gmail.com)

Ihre Anmeldung wird rechtsgültig mit der Zahlung der Kongressgebühr auf das unten angegebene Bankkonto. Geben Sie bitte bei Ihrer Überweisung Ihren Name und etwaige Begleiter an und für wie viele Personen Sie bezahlen.

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On-line payments/ <i>Paiements en ligne</i> :/ Online-Zahlungen: (bank fee/ <i>commission de banque</i> /Bankgebühr: +3%)	<a href="http://www.museodellacarta.com/docs/leattivita/registrationform_iph.asp">http://www.museodellacarta.com/docs/leattivita/registrationform_iph.asp</a>



## TRANSPORT / ACCÈS-TRANSPORTS / REISE - HINWEISE

### FABRIANO

#### By car / en voiture / Auto:

If you come from Northern Europe, you have to reach Bologna. Then take the (toll) A14 highway to Ancona and exit Ancona Nord. From here, take the free highway (S.S.76) to Fabriano - Rome and take the exit Fabriano Est (262 km).

If you came from Rome, take the (toll) highway A1 to Florence; exit at Orte and take the S.S.3 Flaminia (direction Terni, Spoleto, Ancona); after Gualdo Tadino take the S.S.76 to Fabriano-Ancona and exit at Fabriano Ovest (219 km). Please consult Google Maps to better information.

*Si vous venez de l'Europe du Nord, vous devez rejoindre Bologna. Ensuite, prendre la (péage) autoroute A14 à Ancône et quitter Ancona Nord. De là, prendre la route libre (SS76) à Fabriano - Rome et prendre la sortie Fabriano Est (262 km).*

*Si vous êtes venu de Rome, prendre le (péage) l'autoroute A1 à Florence; sortir à Orte et prendre la SS3 Flaminia (la direction de Terni, Spoleto, Ancône); après Gualdo Tadino prendre la SS76 Fabriano Ancône et sortie à Fabriano Ovest (219 km). S'il vous plaît consulter Google Maps à une meilleure information.*

Wenn Sie aus Nordeuropa kommen, müssen Sie nach Bologna erreichen. Dann nehmen Sie die (Maut) Autobahn A14 nach Ancona und beenden Ancona Nord. Von hier nehmen Sie die Autobahn (SS76) Fabriano - Rom und nehmen die Ausfahrt Fabriano Est (262 km).

Wenn Sie aus Rom kam, nehmen Sie die (Maut) Autobahn A1 nach Florenz; Ausfahrt Orte und nehmen Sie die SS3 Flaminia (Richtung Terni, Spoleto, Ancona); nach Gualdo Tadino nehmen Sie die SS76 auf Fabriano Ancona und Ausfahrt im Fabriano Ovest (219 km). Bitte konsultieren Sie Google Maps, um bessere Informationen.

#### By train / en train / Mit dem Zug:

Fabriano is on the railway line Rome-Ancona (and vice versa).

If you are coming from North Europe you can reach the railway station of Ancona with fast trains from Turin, Milan, Bologna. From Ancona you can take a train to Rome and get off at Fabriano.

If you come from Rome, take a train to Ancona and get off at Fabriano.

*Fabriano est sur la ligne de chemin de fer Rome-Ancône (et vice versa).*

*Si vous venez de l'Europe du Nord, vous pouvez rejoindre la gare d'Ancône avec des trains rapides de Turin, Milan, Bologne. De Ancona, vous pouvez prendre un train pour Rome et descendre à Fabriano.*

*De Rome: prendre un train de Rome à Ancône et descendre à Fabriano.*

Fabriano ist auf der Bahnstrecke Rom-Ancona (und umgekehrt).

Wenn Sie aus Nordeuropa kommen, können Sie den Bahnhof von Ancona mit Schnellzüge von Turin, Mailand, Bologna erreichen. Von Ancona können Sie einen Zug nach Rom nehmen und in Fabriano aussteigen.

Wenn Sie aus Rom kommen, nehmen Sie den Zug nach Ancona und in Fabriano Aussteigen.

#### Flights / vols / Flüge:

We recommend direct flights to Rome and then the train to Fabriano.

If you want to take a flight to the airport of Ancona (Falconara), on arrival take the bus to the train station (Falconara or Ancona).

We remind you that many timetables will change from June, 8, so check with your travel agency.

*Nous recommandons que des vols directs à Rome et puis le train à Fabriano.*

*Si vous voulez prendre un vol pour l'aéroport d'Ancône (Falconara), à l'arrivée, prendre le bus à la gare (ou Ancône ou Falconara).*

*Nous vous rappelons que de nombreux horaires vont changer du 8 juin. Afin de vérifier les horaires, parlez avec votre agence de voyage.*

Wir empfehlen den direkten Flügen nach Rom und dann mit dem Zug nach Fabriano.

Wenn Sie einen Flug zum Flughafen von Ancona (Falconara) nehmen wollen, bei der Ankunft mit dem Bus zum Bahnhof (zu Ancona oder Falconara) fahren.

Wir erinnern Sie daran, dass viele Fahrpläne werden vom 8. Juni geändert. So überprüfen Sie mit Ihrem Reisebüro.

### Fabriano Tourist Office / *Office de Tourisme de Fabriano* / Tourismusbüro von Fabriano

The Tourist Office of Fabriano (IAT) is at your disposal for any information you need on your journey.

iat.fabriano@provincia.ancona.it

*L'Office de Tourisme de Fabriano (IAT) est à votre disposition pour toute information dont vous avez besoin sur votre voyage. iat.fabriano@provincia.ancona.it*

Das Tourismusbüro von Fabriano steht zu Ihrer Verfügung für alle Informationen, die Sie auf Ihrer Reise benötigen. iat.fabriano@provincia.ancona.it

## AMALFI

### By car / *en voiture* / Auto:

1 hour drive from Amalfi is required to reach Vietri sul Mare where you can find the highway (A3/A30) to Naples > Rome.

*1 heure de route d'Amalfi est nécessaire pour atteindre Vietri sul Mare où il ya la autoroute de Naples > Rome (A3/A30).*

1 Stunde Fahrt von Amalfi ist erforderlich, nach Vietri sul Mare, wo man die Autobahn nach Neapel und Rom (A3/A30) erreichen kann.

### By train / *en train* / Mit dem Zug:

From Amalfi you have to reach Salerno train station with the bus operated by SITA. In the months from April to October you can also reach Salerno by ferry. Timetables and information on the site [www.amalfiweb.com](http://www.amalfiweb.com)

*De Amalfi, vous devez atteindre la gare de Salerne avec le bus exploité par SITA. Dans les mois d'avril à octobre, vous pouvez également accéder à Salerne en ferry. Horaires et informations sur le site [www.amalfiweb.com](http://www.amalfiweb.com)*

Von Amalfi müssen Sie Salerno Bahnhof mit dem Bus von SITA fahren um Salerno Bahnhof zu erreichen. In den Monaten von April bis Oktober können Sie auch Salerno mit der Fähre erreichen. Fahrpläne und Informationen auf der Website [www.amalfiweb.com](http://www.amalfiweb.com)

### Flights / *vols* / Flüge:

From Amalfi to Naples airport (Capodichino) there is the service SITA, either direct or with change at Salerno.

*De Amalfi à l'aéroport de Naples (Capodichino) il ya un service de bus de la SITA, qu'elle soit directe ou avec changement à Salerne.*

Von Amalfi zum Flughafen Neapel (Capodichino) gibt es den Service SITA, entweder direkt oder mit Umsteigen in Salerno.

# Scottish Papermakers and the first Fourdrinier machines in America

Ewen Jardine

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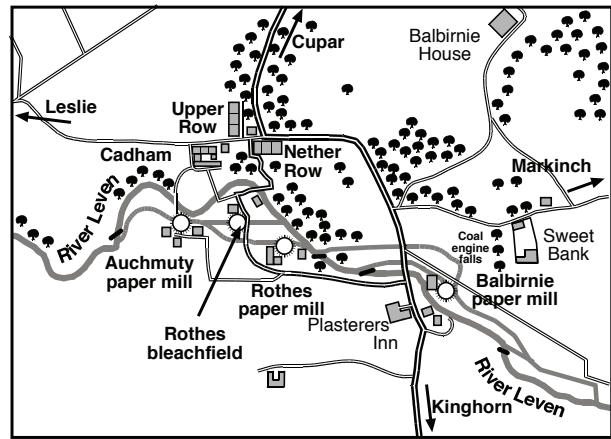
In 1827, four young Scottish papermakers were invited by American industrialist, Henry Barclay, to start up the first Fourdrinier paper machine in America at Saugerties, New York State. These four young men, David Grieve, Alexander Whyte, Peter Adams and Thomas Lindsay had all learned their papermaking skills in the three new mills on the River Leven in Fife, Scotland. Two years earlier, they would have helped David Lindsay install and start up the first Fourdrinier paper machine in Fife at Rothes Paper Mill.

Archibald Keith, a papermaker at Newbattle Mill near Dalkeith, financed the building of the first paper mill in Fife at Rothes on the Leven for his younger half-brother William. (In some Court Papers William is referred to as Archibald Keith's son.) The tack for the mill was granted by Elizabeth, Countess of Rothes. Work on the mill started at Martinmas 1804. [1]

Sadly William died at the paper mill two years later on 12<sup>th</sup> November 1806 before the mill started production. [2] The mill was left to his 13 year old son, Archibald.

James Lindsay, a papermaker at Valleyfield Mills in Penicuik, had married William Keith's elder sister, Janet. It is likely that he moved to Rothes Mill with some of his family to assist in the start up and operation of the handmade paper mill. He would have been assisted by his eldest son, David, who married Ann Allan of Leslie on 19<sup>th</sup> January 1810. [3]

The founding of Rothes Paper Mill proved to be the start of an expansion of papermaking on the River Leven in Fife. Just upstream, Robert Tullis, a printer in Cupar, purchased Auchmuty Mill in 1809 and with the help of Balerno papermaker, Alexander Grieve, started a second paper mill on the Leven in 1810. [4] Five years later, Alexander Grieve left to start out on his own account, building a paper mill just downstream from Rothes mill at Balbirnie Bridge. His place at Auchmuty Mill was taken by John Craig, who introduced his 8 year old nephew, Peter Adam,



*The founding of Rothes Paper Mill, Fife*

to the skills of making paper. [5] The 33 year old John Craig had been born in 1782 at Huntingtower Paper Mill, Perth. [6] He would later manage his own Moffat Paper Mill near Airdrie. Under the supervision of John Craig Auchmuty Mill continued to flourish.

Rothes mill did not fare so well, but through no fault of its own. On 27<sup>th</sup> August 1810 the whole estate, real and personal, of Archibald Keith, papermaker at Newbattle was sequestered. His creditors met at Mrs Scrimgeours Tavern in Edinburgh on 4<sup>th</sup> September 1810 when every right, title and interest formerly in the bankrupt was vested in the Trustee. [7] The trustee was John McNiven, stationer at Blair Street in Edinburgh, who now became the owner of the whole lands and other heritable estate belonging to Archibald Keith. This included Rothes Mill, which Archibald Keith had given to his half brother, William, and was now owned by William's son and heir, Archibald.

The Trustee kept Rothes Mill running while the mill was put up for sale on 12<sup>th</sup> December 1810. There were no offers.

On 1<sup>st</sup> March 1813 there were 11 people working at the mill. The rent was £30. The buildings were valued at £1200 and the utensils and machinery were valued at £800. [8] On 20<sup>th</sup> January 1814 the mill was again up for sale for £1000.

## David Lindsay at Rothes Mill

In May 1814 John McNiven, stationer in Edinburgh advanced James Lindsay's oldest son, David, £1000 to carry on the mill. On 17 January 1815 the mill was conveyed and assigned to David Lindsay, papermaker

at Roth's Mill and Thomas Whyte, merchant in Leslie. [9]

David Lindsay and Thomas Whyte were related having married half-sisters, Ann and Jean Allan. Also at around this time and before April 1815, David Lindsay was joined by his brother, Adam, and his family. [10] Adam would have been a papermaker at one of John White's paper mills on the Esk near Penicuik. White's mills were put up for sale in January 1815.

There were still financial problems at Roth's. Following lapses in his merchanting business, Thomas Whyte filed for bankruptcy with debts of nearly £2000. His creditors met in Edinburgh on 22nd May and again on 12th June 1817 to appoint William Scott, an Edinburgh accountant as trustee. On the 1st April 1818 Thomas Whyte was discharged after agreeing to pay creditors 11 shillings per pound. [11] William Scott agreed to David Lindsay paying £150 as full payment of all demands on Thomas Whyte.

Roth's Mill prospered, with John McNiven purchasing significant quantities of paper for his stationery business at Blair Street in Edinburgh. (This business was eventually to become MacNiven and Cameron). In 1824 John McNiven agreed to fund the installation of a paper machine with drying cylinders. In a contemporary machine of the period the breakdown of costs for a 56 1/2 inch machine was:

	£
Paper machine	475
Drying machine	200
Extras	165
Erection	152
Total	992

(1825 Donkin machine to Firmin, Didot & Sons of Paris) [12]

John McNiven advanced David Lindsay £700 towards the end of 1824 and a further £400 on 14th January 1825. The experience gained in starting up this machine probably led to the request for four of those involved to be invited to start up Henry Barclay's machine in New York State.

It is likely, too, that, after the successful start-up of the first American Fourdrinier, David Lindsay, himself, was invited to become its manager. [13] David

Lindsay would, without doubt, have been invited to invest in the enterprise.

## The move to America

David Lindsay's financial manoeuvres resulted in a lack of payment of bills and taxes. On 26<sup>th</sup> August 1829 the Board of Excise intervened and took control in order to recoup arrears of duties. Under the Excise the mill continued running until 3<sup>rd</sup> September. The officers of the Excise sold the effects of David Lindsay on 21<sup>st</sup> October under the Excise Warrant. The £450 that resulted was used to pay the balance of duties and penalties due to them. His estate was sequestrated on 3<sup>rd</sup> November 1829. The creditors met on 11<sup>th</sup> November at Lows Inn Kirkcaldy. Archibald Young was appointed Trustee on 25<sup>th</sup> November 1829. [14]

While this was going on, David Lindsay left Roth's Mill on 26<sup>th</sup> August bound for Saugerties in New York State. Alexander Whyte, the son of former partner, Thomas Whyte, resided and was a papermaker in Saugerties, where Henry Barclay had just installed America's first Fourdrinier paper machine. This had been built by Brian Donkin and imported into the States. Alexander Whyte was employed by Saugerties Paper Company, one of the partners of which was Moses Yale Beach.

On the 27<sup>th</sup> August Lindsay withdrew £1000 from his bank account in Kirkcaldy (the balance in the bank due to him was said to be £1669. 13. 10d). £1000 in 1830 would be worth £75,500 in 2009 based on the retail price index or £829,000 using average earnings. [15] He travelled to Greenock with the £1000 to take his passage to America. En route, he purchased, in his wife's name, a 'bill on London' for £300. He had already paid his own and his wife's travelling expenses to Greenock and their passage money to America. With the remainder he purchased dollars and doubloons (\$1900 at 4/4d each and 52 or 53 doubloons at £3.8.6d each). Reaching Greenock he found that his berth was already occupied. Anxious to leave the country as quickly as possible, he and his wife travelled to Liverpool where he paid a second time for their transatlantic crossing and sailed to New York on Captain Rattray's brig the Joseph Hume.

The vessel arrived in New York on 13<sup>th</sup> October and Lindsay and his wife proceeded up the Hudson River to Saugerties. They stayed for about 2 months before

Mr McNiven's Account by Lindsay			
1814	May 16	To cash borrowed from J McNiven	£1000. 0. 0
	November 16	Balance due	£ 977. 5. 4
1815	May 31	“ “	£ 715. 7.11
	November 11		£ 866. 5. 5
1816	May 15		£ 757. 7. 7
	November 8		£ 843. 2. 1
1817	May 8		£ 856.12. 4
	November 11		£ 843. 2. 4
1818	May 11		£ 846. 8. 4 $\frac{1}{2}$
	November 11		£ 858.17. 1
1819	May 11		£ 917. 7. 4
	November 10		£ 892.16. 1
1820	May 31		£ 659. 2. 0
	November 11		£ 667. 5. 8
1821	May 2		£ 600.15. 4
	November 11		£ 593.19. 6
1822	May 11		£ 569.18. 1
	May 31		£ 523. 8. 4
	November 11		£ 490. 0. 0
1823	May 12		£ 473.19. 4
	November 11		£ 458.19. 1
1824	May 11		£ 400. 4. 7
	May 31		£ 433. 4.10
	£700 advanced by McNiven to Lindsay		
	November 11	Balance due	£1102.19.10
1825	January 14	£400 advanced by McNiven to Lindsay	
	May 11	Balance due	£1499. 2. 1
	November 11		£1421. 8. 9
1826	May 11		£1498. 5.11
	Business of John McNiven merged with P & W McNiven Credit now to Messrs P & W McNiven		
	November 11	Balance due to P & W McNiven	£1400.19. 7
1827	May 11		£1385.18. 7
	November 11		£1274. 0. 4
1828	May 12		£1240.14. 1
	November 11		£1192. 2. 9
1829	May 11		£1142. 3. 6

Source: NRS CS96/153/1 page 213

returning to Glasgow in January 1830, possibly so that he could receive medical treatment.

The creditors of David Lindsay heard of his return and the trustee set off for Glasgow. David Lindsay was indisposed and his doctors were unwilling for him to travel to Cupar to be questioned. However, on 5<sup>th</sup> May 1830 he was eventually interrogated in Cupar. He outlined the history of the mill, confirming that John McNiven had advanced £1000 but withheld the title deeds. He also outlined his finances at the time of going to America, stating he had approximately £80 when he returned to Scotland four months previously. He agreed to put together a state of his affairs, so far as he could from his books, and submit it to the next examination within 14 days.

The second public examination of David Lindsay took place on Monday 24<sup>th</sup> May 1830. He stated that, having paid £10 to the Excise, he now had about £30 to £40. This money was in the possession of his wife, but he swore on oath (“I do in the presence of Almighty God and as I shall answer to God at the great day of judgement solemnly swear ...”) to send the money to George Elder at the Bank of Scotland in Kirkcaldy on the following day.

However, in a letter to Archibald Young, trustee, he gave his excuses for not doing so. Young, having discovered that David Lindsay had left his residence at Rothes Mill, feared that he would again leave the country, thereby defrauding his creditors. He requested a warrant for his apprehension, which was



granted on 11<sup>th</sup> June. Officers of the court and their assistants were to search for and apprehend David Lindsay wherever he can be found in the County of Fife. When apprehended he was to be imprisoned within Cupar Tolbooth and remain there until he had delivered up the funds he had admitted to at the date of his examination. If he could not be found in Fife, sheriffs and magistrates in other counties of Scotland were to be granted similar powers.

On 21<sup>st</sup> June David Lindsay's wife's sister, Jean Whyte, was examined under oath. She said it was two weeks (Monday 7<sup>th</sup> June) since she had seen David Lindsay at the mill. Her sister, Mrs Lindsay had left Rothes Mill on Wednesday 16<sup>th</sup> June with her daughter, Helen Whyte, and Mr Lindsay's sister Rosa. They had taken with them two chests that had been left in her possession. The week before David Lindsay had taken the midday coach at Plasterers Inn, Balbirnie Bridge, taking nothing with him but an umbrella. She understood he was going no further than Edinburgh. In fact he had made his escape and once again set sail for New York and Saugerties where it is likely he took up the position as manager of the Saugerties Paper Mill.

Later in the year, he was, once again, joined by his brother, Adam, and his wife, Jean Hogarth and Adam's nine children. Sadly, within a year David Lindsay died in Saugerties on 5<sup>th</sup> February 1831 aged 50. [16]

Henry Barclay, a man who had made his fortune in New York, travelled up the Hudson River to witness



*Saugerties Paper Mill*

the opening of the Erie Canal in 1825. When passing Saugerties, he saw the potential for waterpower from Esopus Creek. He set about purchasing the land on Esopus Creek and built a weir. He then erected an iron works and a paper mill. The paper mill was located on the south-west side of Esopus Creek. To run these mills he attracted skilled men from Britain.

He purchased the first Fourdrinier paper machine to be imported to the United States from Bryan Donkin, recruiting four young Scots to install and run the machine — Peter Adams, David Grieve, Thomas Lindsay and Alexander Whyte. As can be imagined, English papermakers voiced strong objections to the export of a machine that would adversely affect their paper exports to the US. According to Peter Adams the machine lay in Liverpool for 2 years before it was permitted to go through the customs house. [17]

The 60 inch Fourdrinier is likely to have been started up on 17<sup>th</sup> October 1827, although it appears the two machine tenders, Peter Adams and Thomas Lindsay, were not paid until some six weeks later on 1<sup>st</sup> December! [18]

Having seen the paper machine started up, Henry Barclay now turned his talents to other projects. The Esopus Creek was to become the largest water powered industrial complex in the world. He leased the paper mill to Moses Yale Beach and his local partners, John W. Kearney and George Hammeken.

In 1829 a second paper machine from Britain was installed. This time, it was built by Joseph Newbold near Bury, Lancashire and was 62 inches wide.

Moses Beach had a brother-in-law, Benjamin Day, who had travelled to New York in 1829 to seek his fortune. Working as a compositor, he conceived the idea of selling a newspaper for one cent (penny). At some time during 1832 Day acquired his type and a manual, hand-crank job press, one that could throw off two hundred impressions an hour.

By September 1833 he was ready to put his plans into action. He had received the paper order from his sister's husband, Moses Yale Beach at the paper mill in Saugerties on the Hudson. Now with paper, a printing press, type, and his small office, he was ready to put his plan into action. In 3<sup>rd</sup> September 1833 he launched the New York Sun. The newspaper,



selling for just a penny was so successful that it was soon the largest selling newspaper in the world. [19]

In the meantime, this success did not prevent Moses Yale Beach running into financial difficulties and on 24<sup>th</sup> July 1835 his lease for Saugerties Paper Mill, the machinery, water power, pathways, privileges, hereditaments and appurtenances thereunto belonging were put up for public sale by the sheriff. [20]

The lease may have been bought back by Henry Barclay, for on his death in 1851 it came into the hands of the Joseph B Sheffield and Company. When the mill caught fire in 1872, there were still parts of the historic machines in use. [21]

Many of those connected with the venture went on to further success. Peter Adams left Saugerties for Morristown and Paterson, New Jersey in September 1835, shortly after the sale of the paper mill. After a number of ventures, he purchased his own mill in the village of Buckland, Connecticut and built it up to become a mill, which, at one time, was considered the largest and best in the country.

Alexander Whyte may be the practical paper-maker who purchased the Columbia Mill with Samuel A. Hulbert before 1847. [22] In 1857, after the failure of the mill, he engaged in papermaking at Richmond, Virginia. [23]

Adam Lindsay moved with his family to Norwich, Connecticut, where the first American built Fourdrinier machine had been in operation since May 1829. This machine was built by George Spafford and James Phelps for Amos H. Hubbard, who operated a hand made paper mill. Spafford had installed America's second Fourdrinier machine, which was made in France, at the Pickering Paper Mill in North Windham, Connecticut. This machine was operating in 1828. [24]

Adam died in Norwich in 1843, but his family continued the papermaking tradition of their father. His daughter, Rosalind (Rosa) Thomson Lindsay married an immigrant from Crook of Devon in Scotland, William Luke. His family owned a paper mill there. He came to the States in 1852 where he first worked for his uncle, James Logan, at Bloomingdale, New Jersey. [25] [26] Rosa and William were married in Westville, New Haven CT while William

was working in Trenton, New Jersey. William Luke took over from his brother-in-law, David Lindsay, as superintendent of the Jessup and Moore Mill at Rockland, Delaware. [27] He ordered the first two paper machines built by the Wilmington shipbuilders, Pusey and Jones. He and his sons were instrumental in founding the first successful commercial Sulphite pulp mill at Piedmont. This led to the founding of the West Virginia Pulp and Paper Company.

Adam Lindsay's grandson, David, was orphaned at an early age and was brought up by his Uncle Thomas and grandmother, Jean Hogarth. He succeeded his uncle as Superintendent of the Jessup and Moore Augustine Mills, Wilmington, Delaware in 1870. When Jessup and Moore Paper Company was incorporated in 1870, he became a director and shareholder. [28]

The papermakers from Saugerties in 1830 were influential in the spread and success of papermaking in the United States in the years that followed.

Meanwhile, back in Scotland, David Lindsay's Rothes Paper Mill was being sold. On 11<sup>th</sup> December 1835 John McNiven agreed to hand over the lease for a payment of £60 plus a quarter of the net proceeds. The Trustee, Archibald Young, and Commissioners, James Brown, papermaker, Eskmills, James Edington, merchant in Leith and Mr Murray were now able to sell the mill. The mill had been valued at £2,400 10/- by George Laing, Balerno Mill. However he warned that they might not receive this. He had valued Kate's Mill at £3,200 and it sold for £1,800. Colinton Mill also did not reach its reserved price of £800 and was sold for £700. In the event, Rothes Paper Mill was put up for sale by Public Roup at an upset price of £2,000 on 27<sup>th</sup> January 1836. After going up in small increments, George Blyth at Cowan Mill offered £2,460. William Tullis dropped out at £2500. Thomas Ewing, who had offered the upset price of £2000, went up to £2980. John Jameson provided the highest offer of £3,050 on behalf of Robert Tullis & Co. [29]

Tullis Russell Papermakers continue to operate successfully the Rothes and Auchmuty Mills, but the Balbirnie Paper Mill closed in 2002.

## Appendix

### Biographies

#### Peter Adam(s)

Born Forfarshire, Scotland 2<sup>nd</sup> February 1807 to George Adam, a gardener to trade, and his spouse, Louisa Sutherland. At the age of 8 he began working for his uncle, John Craig, superintendent of the Auchmuty mill of Robert Tullis & Co.

At this time he also attended night school at the Rothes Paper Mill and Bleachfield schoolroom in Coalhill (now Cadham).

This is a description of the school by one of the Ballingal Family (mine managers) of Sweetbank:

“It was part of a row of thatched cottages and the school was a long low room with small windows, forms without backs, a scanty supply of books and maps, a good deal of dirt and bad air and a frequent use of the tawse (a leather strap) ..... Most of the children were from colliers’ cottages but we were never conscious of any class distinction. The only grievance my brother and I had was that in summer we were not allowed to go barefoot like the others but we got into the habit of hiding shoes and stockings in a wood on our way to school and thus escaped being boycotted in our play because we wore tackety shoes.” [30]

The school catered for forty-five 4 - 12 year old children.

After 2 years at Auchmuty Mill he went to Aberdeen, but returned to Auchmuty at the age of 17 to learn the trade of papermaking under the guidance of his uncle. After 3 years he qualified as a journeyman papermaker and on 27<sup>th</sup> August 1827 he sailed from Greenock for New York on Captain Shotwell’s vessel, “Samuel Robinson.” Landing in New York on 4<sup>th</sup> October, he went Saugerties, starting work there on 24<sup>th</sup> October 1827.

He married Hannah Shaeffer, widow of Calvin Floyd, on 16<sup>th</sup> July 1831. They had six children, only one daughter, Louisa, reaching old age.

Peter Adams remained in Saugerties until September 1835 before moving to New Jersey.

He had a management role in the paper mill of William Knight in Morristown, New Jersey until October 1837 when he moved to Paterson, New Jersey. In 1835, Henry V. Butler, who came from a papermaking family and had a small paper mill in New York, erected a two machine paper mill on the Passaic River with the financial assistance of his brother-in-law, Captain Robert L. Taylor. Henry Butler was not a practical papermaker himself, but he had the wisdom to employ the very best papermakers and so produce the best paper.

On 22<sup>nd</sup> November 1837 Peter Adams became foreman of HV Butler & Co.’s Passaic Paper Mill, remaining in that post until 11<sup>th</sup> May 1859. During that time Ivanhoe Paper Mill was erected under his supervision. This mill was fitted with two machines and all the most improved machinery and appliances of the day, so that when it became operational in 1850 it was regarded as “the finest paper mill in the country, if not in the world.” [31] In 1854, Peter Adams had started Adam’s RR Freight line, New York and Paterson express, which was run successfully by his sons, James H. and Peter C Adams.

In 1860, Peter Adams returned to Scotland for a visit. During his visit he attended the burial of his uncle, John Craig, from whom he had had his first lessons in papermaking.

On January 1<sup>st</sup> 1864 he took over Godwin and Sheldon’s paper mill in the village of Buckland in the town of Manchester, Connecticut taking with him John Ramage, who had succeeded him as foreman of H V Butler. The partnership with Ramage ended a year later when his son, Peter C Adams, took over as partner.

Peter Adams’ Waverley Mills were supplied with abundant water from the Hockanum River. Originally, there was one paper machine in a small wooden building.

Peter Adams purchased more land and developed the mill using brick for the buildings. Two Fourdriniers, one 86 inches wide, were producing six tons per day of high quality writing papers. The quality was born out by the fact that it was chosen for the printed

catalogue of the World's Fair in Paris in 1878 gaining bronze medal. His paper was also awarded a silver medal at the Melbourne International Exhibition of Australia in 1880. This was for paper that had been made for normal trade and he did not know had been placed on exhibition. It is also said that Mark Twain used Adams Mill's paper for the writing of his books.

The office for the mill was, in 1883, said to be an artistic little building, standing in the maple-shaded grounds. It was fitted with a telephone, all the modern improvements and adorned with pictures. "Altogether this mill ranks as one of the best in its class in America."

The present Adams Mill building is one of the best-preserved structures close to the river. However, most of the complex was destroyed by fire in 1897 and a hurricane in 1938 destroyed the dams and pond. Part of the mill building was faithfully restored and in October 1982 it opened as the Adams Mill Restaurant. [32]

Mrs Adams had died on 7<sup>th</sup> July 1868. Peter Adams died on 10<sup>th</sup> December in 1889 in Paterson New Jersey, where he had set up home back in 1837.

## Alexander Whyte

Born Leslie, Fife 13<sup>th</sup> July 1801 the son of Thomas Whyte, merchant in Leslie and Jean Allan, his wife. [33] He is likely to have learned his papermaking skills at Roth's Paper Mill, which was, for a time, part owned by his father. He emigrated to Saugerties, New York and assisted at the start up of the first Fourdrinier machine in America.

Alexander Whyte may have been the practical papermaker, who purchased the Columbia Paper Mill, Lee, Mass. with Samuel A. Hulbert.

In 1857 the firm succumbed to financial pressure. Mr Whyte, after the failure of the company, engaged in the manufacture of paper at Richmond, Virginia. He died in New York in 1873. [34]

## David Grieve

Born in the parish of Currie, Midlothian on 10<sup>th</sup> May 1807 to Alexander Grieve, paper manufacturer at Balerno Mill and his spouse, Janet Hume. [35]

David Grieve became the papermaker at Balbirnie (Mill 14) at the age of 18 according to Pigot's 1825 directory. His father had contracted palsy and passed the mill on to his only son. David, however, immigrated to America and the mill was left in the charge of his younger sister, Janet Logan Grieve, who was just 15 in 1825. A list of Paper mills in Scotland 1825 gives the owner as Janet Grieve. She was still owner in 1860. Alexander Grieve, manager at Robert Tullis' Auchmuty Mill from 1810, started his own mill at Balbirnie in 1816. Alexander Grieve died aged 46 at Balbirnie Paper Mill on 20<sup>th</sup> October 1827.

At that time, David Grieve was in Saugerties New York starting up America's first Fourdrinier. He kept a Manuscript Day Book (64 pages) detailing the accounts of Saugerties Paper Mill between October 1827 and 1828. The flysheet puts David Grieve at the Saugerties Paper Mill on 4<sup>th</sup> July 1827. The day book records the debits and credits of the mill, showing that some people made payment for their paper through other goods or services. Some paid by washing and mending, while one woman paid by making 8 shirts. The purchase of several pine orchards are recorded as well as the purchase of linen. [36]

## Thomas Lindsay

Thomas Lindsay was born in Penicuik on 10<sup>th</sup> July 1797 to James Lindsay, papermaker there, and his spouse, Janet Keith. His oldest brother, David, became owner of Roth's Paper Mill in 1814. It is likely that he learned papermaking at Roth's Mill.

In 1827 a Thomas Lindsay was one of four Scots who started the first Fourdrinier in America at Saugerties, NY.

## Moses Yale Beach

Born 7<sup>th</sup> January 1800, son of Moses Sperry Beach of Wallingford Connecticut and Lucretia Yale. He married Nancy Day of Springfield, Mass. on 19<sup>th</sup> November 1819.

Moses Beach learned the trade of cabinet-maker at Hartford, Connecticut before setting up in business in Northampton, Mass. and afterwards at Springfield, Mass. He had an inventive mind. His main success was a rag cutter for paper mills, which, unfortunately,

he did not patent. It did bring him to Saugerties, N. Y., where, with partners John Kearney and George Hammelen, he leased Saugerties Paper Mill from Henry Barclay.

In 1835 he joined his brother-in-law, Benjamin Day in New York City as technical manager of the New York Sun, purchasing part ownership for \$5,200. The Sun was the most popular newspaper in the world with 30,000 readers, yet production costs and low advertising revenues in an economic depression kept profits low. So in 1838 Day sold his holding of the Sun to Beach for \$40,000.

Now sole proprietor of the Sun, Moses Beach pioneered co-operative newsgathering by telegraph by offering to share news he had gathered on from the US/Mexico war with his competitors. This resulted in the founding of The Associated Press (AP). In 1994 AP launched AP Television News with its headquarters based in London. Moses Beach's sons, Moses Sperry and Alfred Ely, joined their father on the Sun in 1845. The family managed the Sun until 1868 when it was sold for \$175,000 to a group of investors headed by Charles Anderson Dana, who became editor. Moses Yale Beach retired to his original home town of Wallingford in 1857. He died there on 18<sup>th</sup> July 1868. [37]

Moses Yale Beach's sons inherited their father's inventiveness. Moses Sperry Beach is said to have invented a method of feeding rolls of paper into the printing press. Less than a year after its first edition, Alfred Ely Beach and a school friend, Orson Desaix Munn purchased the weekly Scientific American from its founder, Rufus Porter. Munn and Company's first issue was dated 23<sup>rd</sup> July 1846. The magazine stimulated innovations becoming extremely popular. It switched from weekly to monthly in 1921.

## CV

\*Ewen Jardine is a retired papermaker. He learned the craft at James Brown & Co. Ltd. and Inveresk in Scotland and New Zealand Forest Products. After gaining a degree, he entered the field of education, teaching paper technology at Bury College, Glenrothes College and the Robert Gordon University. Ewen was an examiner in Paper Technology for the City & Guilds of London Institute. He is also a Licentiate of the City & Guilds.

Ewen lives in Freuchie, Fife, Scotland with his wife, Evelyn.

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## Julius von Wiesner and his importance for scientific research and analysis of paper

(The paper was presented 21/09 2013 at DAP Deutsche Arbeitskreis für Papiergeschichte in Leipzig)

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For a paper conservator with special interest in the development of paper technology and paper history Julius Wiesner's publications are like Aladdin's cave, rich of botanical descriptions of plants, systematic methods of identification of the fibre materials of ancient paper, hypothesis and conclusions. At the end of the 19<sup>th</sup> century Wiesner founded the scientific analysis of paper, built on optical microscopic observation, chemical tests and identification of the fibre materials through comparative analysis with a reference material. The paper will deal with this renowned Austrian botanist Dr. Julius von Wiesner's special importance for paper history and knowledge, illustrated with citations in German from Wiesner's publications [Fig. 1]. He



Fig. 1: Portrait of Dr. Julius Ritter von Wiesner, 1838 – 1916.

Professor in plant anatomy and physiology. 1868  
Polytechnischen Institut Wien, 1870 Forstakademie  
Mariabrunn Wien, 1873-1909 Universität Wien.

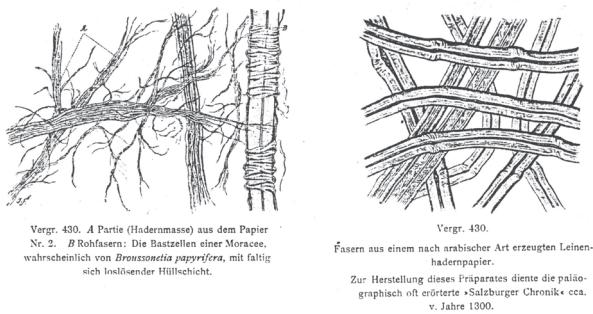


Fig. 2: Wiesner's drawings of microscopic observations. Wiesner, J.: *Mikroskopische Untersuchung alter ostturkestanischer und anderer asiatischer Papiere nebst histologischen Beiträgen zur mikroskopischen Papieruntersuchung*, Wien 1902, p.46 [628]

had from 1886 – 1911 been involved in scientific analysis of ancient Arab paper and of archaeological paper, excavated in East Turkestan and Central Asia. Wiesner documented his microscopic observation of specimens of fibres with detailed drawings [Fig. 2]. This was the tool available until photographic documentation of observations was developed. In this paper digital photographic documentation from analysis of handmade paper of similar origin and provenance as Wiesner's material has been used to illustrate the microscopic observation.

As one of the pioneers within the field of microscopy and plant anatomy and plant physiology a number of Wiesner's many publications have special interest for analysis of ancient paper such as "Technische Mikroskopie" from 1867, "Die Rohstoffe des Pflanzenreichs" from 1873 and "Die Fajjûmer und Uschmûneiner Papiere" from 1886-87. The last one was part of the book "Das Arabische Papier" published 1887 in Vienna by Joseph Karabacek.

## Das Arabische Papier 1887

- Zum ersten Male hat Wiesner's Bearbeitung des Papiere der Sammlung „Papyrus Erzherzog Rainer“ eine sehr umfassende naturwissenschaftliche Untersuchung ermöglicht.
- Mit einer historisch-antiquarischen Untersuchung ging diese Hand in Hand.

Wiesner presented the results of his scientific analysis, built on optical microscopic observation of the separated bast fibres with a lecture at "Kaiserliche Akademie der Wissenschaften" in Vienna. This lecture was of high importance for paper historians, palaeographers and paper conservators, because paper history in Europe had until 1887 except for

Briquet been based entirely on the palaeographic studies of written sources. Wiesner's analysis of the fibre material of more than 500 Arab manuscripts documented that Arab paper was not made of cotton, but of similar recycled flax- and hemp bast fibres as European rag paper from worn out textiles. Cotton was only found scarcely represented among the fibres and no paper existed of pure cotton fibres as hitherto claimed by the western palaeographers.

## Das arabische Hadernpapier

- Die ältesten Papiere bisher bekannten arabischen Papieren waren durchwegs Hadernpapiere.
- Sie waren reine Hadernpapiere, welche keinen Zusatz roher Pflanzenfasern auswiesen.

## Cod. Arab. 135, Wiesner CXXXV

- 1184-85 n. Chr. Hadernpapier. Hauptmasse: Leinenfaser, etwas Baumwolle.
- Leimung: Stärke Kleister, erst durch Salzsäure und Jodlösung zu finden.

The above description of Cod. Arab 135 originates from Wiesner's publication from 1887. The document described is to be found at the Royal Library in Copenhagen, where I have had the possibility to study the manuscript macroscopically and collect a tiny sample of the paper for microscopic analysis. The Scanning Electron Microscopic observation illustrates the undisturbed surface of the Arab paper of flax and hemp rag fibres [Fig. 3].

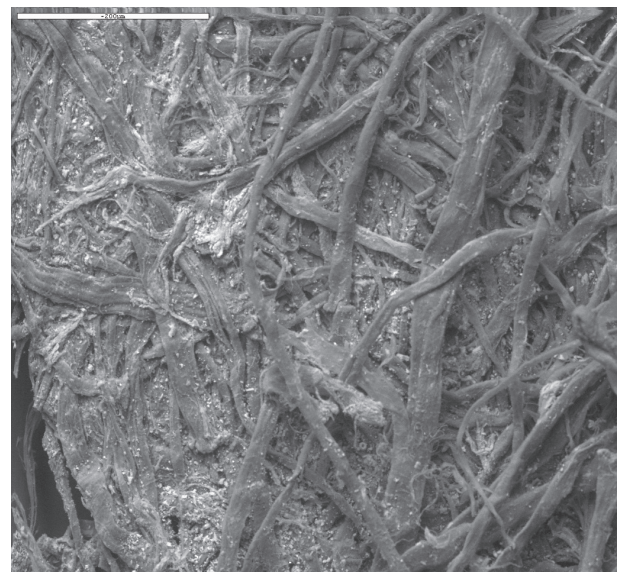


Fig. 3: SEM (Scanning Electron Microscope) illustration of the undisturbed surface of the 12th century Arab manuscript COD. Arab. 135, Wiesner CXXXV, Royal Library, Copenhagen



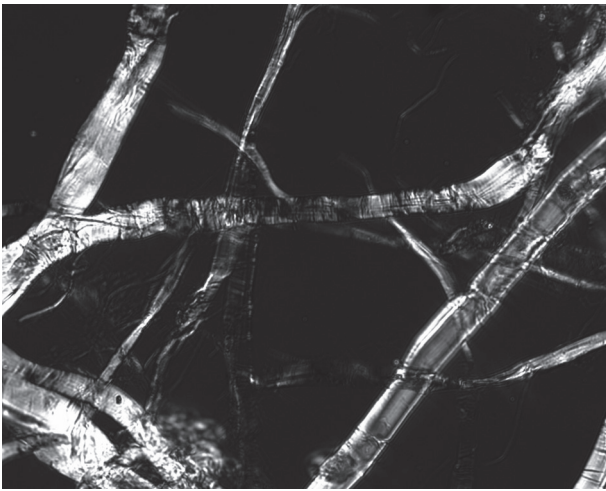


Fig. 4: POL (Polarisation Microscope) illustration of the difference between the diagonal flax fibre (right side) and the horizontal and diagonal hemp fibres.

The separated individual bast fibres from Cod. Arab 135, observed in the Polarisation microscope, more clearly illustrate the difference between the flax fibres of even width compared to the more irregular hemp fibres with longitudinal striations and splits [Fig. 4].

Julius von Wiesner's scientific examination through microscopic observation and chemical spot tests in 1886-87 completely changed European and Western paper history that hitherto had been built on the palaeographic interpretation of written sources.

## Änderung der Papiergeschichte

- Mikroskopische Untersuchungen haben gegen alle Erwartung den Beweis geliefert, dass kein einziges der Faijûmer Papiere ein Baumwollenpapier ist.
- Sie wurden durchwegs aus Hadern (Lumpen), vornehmlich Leinenhadern bereitet.

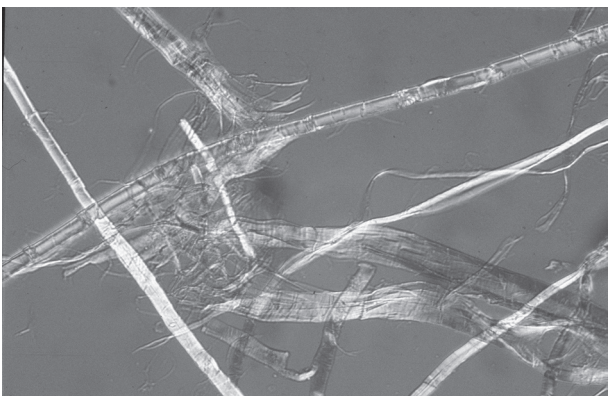


Fig 5: DIC (Differential Interference Contrast) microscopic documentation of separated recycled textile fibres from French drawing paper, NM 538, k, dated 1690, from the National Museum, Copenhagen.

Rag paper was not a European 13<sup>th</sup> century invention. Our rag paper technology and paper production was a development of the Arab writing material originating from the 8<sup>th</sup> century. This knowledge of the craft of papermaking was brought by the Arabs to Spain and from here it spread via Italy to the rest of Europe.

## Das europäische Hadernpapier

- Die europäische Hadernpapierfabrikation ist auf eine arabische Erfindung zurückzuführen, welche im 8. Jahrhundert gemacht wurde.
- Später verbreitete sich die europäische Hadernpapierfabrikation über Spanien und Italien nach dem übrigen Europa.

Julius von Wiesner made microscopic observation of Arab rag paper and European rag paper in 1886-1887 and noticed that the recycled Arab textile fibres compared to European rag fibres were less fibrillated and with more fibre ends preserved unharmed, most likely because of a less heavy mechanical treatment.

The microscopic observation in the Differential Interference Contrast Microscope of the papermaking fibres from a French drawing, NM 538, k, dated 1690 from the National Museum in Copenhagen, illustrates Wiesner's observation of frayed and split fibre ends and fibrillation [Fig.5]. Less fibrillation of the Arab fibre material meant a weaker cohesion between the fibres and Arab paper had a tendency of splitting. Therefore European paper soon replaced the less durable Arab paper in Europe.

But shortly after this new discovery of the Arab origin of rag paper in 1887 did archaeological British excavations in East Turkestan reveal the existence of ancient texts, written on birch bark, wood and paper of a much older age than the Arab paper. The areas through the Gobi desert and the Taklamakan desert along the ancient Silk roads were still white spots on the geographic maps. Therefore the Swedish geographer Sven Hedin started his mapping by following and describing the rivers through the deserts.

The examination of the archaeological manuscripts not only involved the palaeographers studies of the written texts and the information preserved here, thanks to the paper about hitherto unknown civilisations and cultures in the oasis along the Silk Roads, but also analysis of the paper. Samples of

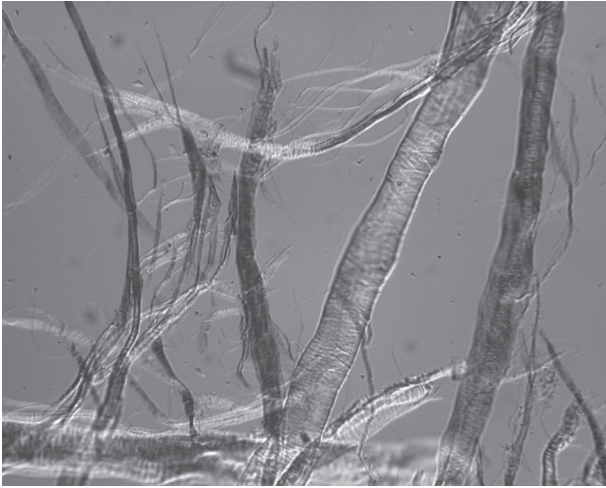


Fig. 6: DIC documentation of separated recycled fibrillated textile fibres from Sogdian/Manichaeon M 765 k fragment from Turfan Collection, Berlin

paper from M. Aurel Stein's excavations were sent from Britain to Julius Wiesner in Austria; because of the palaeographers studies of the important texts most of the samples for the analysis were without texts.

## Neue Papierproben von England 1900

- Herr Prof. Hoernle richtete am 19. Februar an mich das Ersuchen, die Untersuchungen 84 alten ostturkestanischen Papiere zu übernehmen.
- Die meisten waren ohne Schriftzeichen, einzelne mit einigen Schriftzeichen versehen, welche mir ermöglichten die Art der Tinte festzustellen.

Julius von Wiesner presented two years later the important news of his scientific observation and method used for identifying the fibre materials and sizing of the 84 samples of archaeological paper in Kaiserliche Akademie der Wissenschaften in Vienna.

## Wiesner's Publikation 1902

- Mikroskopische Untersuchung alter ostturkestanischer und andere asiatischer Papiere nebst histologischen Beiträgen zur Mikroskopischen Papieruntersuchung.
- Vorgelegt in der Sitzung der Kaiserlichen Akademie der Wissenschaften am 5. Juni, Wien 1902.

Wiesner had expected to find recycled textile fibres, similar to the Arab paper examined 1886-87. The use of local plants as fibre material was also a possibility, and he therefore collected East Turkestan plants, fit for papermaking. Microscopic observation and description of these plants served together with the

descriptions of rag fibres as his reference material in his comparative analysis of the East Turkestan paper samples. Both pure mechanical treatment and chemical maceration of the bast fibres could be represented [Fig. 6].

## Ostturkestanischer Papiermaterialien

- Ich habe folgende Papierrohmaterialien mein Hauptaugenmerk gelenkt:
- Fasern, die vorher schon als Gewebe oder in Form von Seilen, Netzen u.dgl. Verwendung gefunden haben.
- Fasern monokotylen und dikotylen Pflanzen

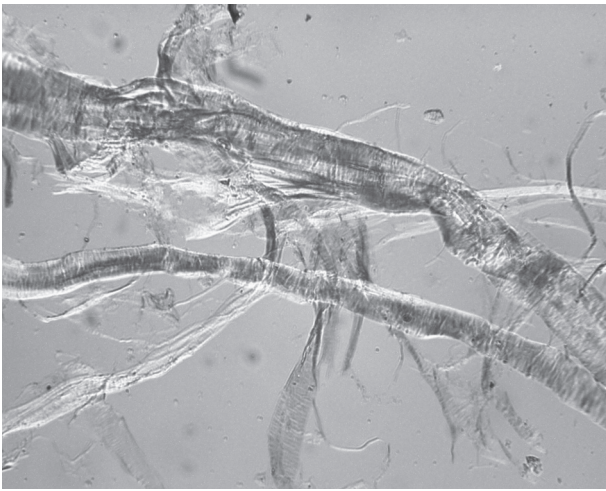
The 84 documents were dated to 4th – 7th centuries by the archaeologists and palaeographers; Wiesner's microscopic observation documented that heavy mechanical treatment in the preparation of the fibre material had been used in the early period of the Chinese paper production. However, the later chemical maceration had been developed in this period and served for the treatment of new papermaking plants, not fit for textile use.

## Chinesische Papierfabrikation

- Die Fasern waren in der ersten Periode der chinesischen Papierfabrikation mechanisch, durch Stampfung, später durch chemische Prozeduren – Mazeration – gewonnen.
- Auch ein gemischtes, ein mechanisch – chemisches Verfahren scheint eine Zeit in Anwendung gewesen zu sein.

Samples of a mixture of recycled ramie - and hemp fibres illustrate the fibrillated condition of the pure mechanical treatment of the bast fibres [Fig. 7]: Sogdian/Manichaeon M 765 c, Turfan Collection in Berlin.

As a botanist Julius von Wiesner builds his observation of the various treatments of the fibre material on the condition of the bast fibres and presence of leading elements, characteristic for the individual species. Paper mulberry fibres are well preserved bast fibres because of the combination of limited mechanical treatment and chemical maceration (cooking in lye of ashes).

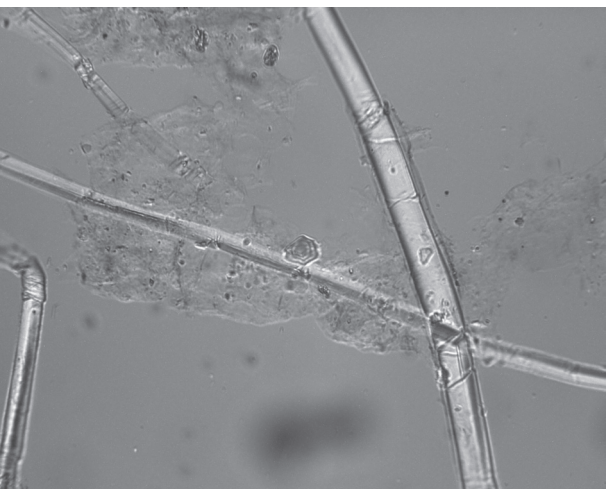


*Fig. 7: Pure mechanical fibrillated mixture of ramie fibres and hemp fibres, Sogdian/Manichaean M 765 c fragment from Turfan Collection, Berlin.*

## Fasern des Papiermaulbeerbaumes

- Wenn eine wohlerhaltene Rohfaser vorliegt, muss man annehmen, dass ein auf chemischer Prozedur beruhendes Verfahren zur Gewinnung der Rohfasern führte.
- Die Bereitung der Papiermaulbeerfasern durch Mazeration errang den Sieg über alle früheren Verfahren.

The characteristic leading elements of the paper mulberry fibres are preserved in the Sanskrit/Brahmi V SHT 400 Gö 140 document from the Turfan Collection in Berlin: the loose primary wall, the presence of calcium oxalate crystals from the plant, the smooth surface and the not-central, slightly irregular and narrow lumen [Fig. 8]. The mixtures of fibres of various origin and condition



*Fig. 8: DIC documentation of paper mulberry fibres with loose primary wall, presence of calcium oxalate crystals and not central lumen from Sanskrit/Brahmi V SHT 400 Gö 140, Turfan Collection, Berlin*

were characteristic for the East Turkestan material of samples. To identify these bast fibre materials and sizing had therefore been much more complicated for Julius von Wiesner to identify compared to the recycled flax – and hemp fibres of the Arab and European rag paper.

## II M. Stein Expedition 1906 - 1908

- Von den ostturkestanischen Ausgrabungen hat Professor Hoernle in Oxford mir neue entsprechenden Proben alten Manuskripte übersendet zu materiellen Untersuchung.
- Später hat er mir auch die wichtige Funde M. Aurel Stein übersendet.

This combination of a mixture of fibres of different origin and condition, characteristic for early East Turkestan paper illustrates how complicated it was to identify the fibre material. Leading botanical elements were mixed or missing and several times Wiesner only identified the eventual plant family

Wiesner's publication 1902 of his presentation in "Kaiserliche Akademie der Wissenschaften" inspired me to a pilot project in 1987 of microscopic and macroscopic analysis of Oriental paper. This pilot project developed since 1991 to studies of European handmade paper and ancient Arab paper from the National Museum and the Royal Library in Copenhagen and of Central Asian from the Hedin Collection in Stockholm, the Stein Collection in London and the Turfan Collection in Berlin. It is a nearly non-destructive analysis where only a tiny sample of the paper is needed for a permanent specimen for microscopic observation. The materials from the papers examined were of similar origin and provenance as the Arab paper from Vienna and the East Turkestan paper from British Library.

Microscopic observations from these projects with various types of microscopes are used in this paper to illustrate the data of papermaking fibre materials available through Wiesner's method of analysis. Without a profound botanical background I was completely dependent of the description of plants from the botanical literature, first of all of Wiesner's "Die Rohstoffe des Pflanzenreichs". Here I found detailed descriptions of the various plants used for papermaking, but I soon realized that only few leading elements were preserved in the fibres from



paper after the preparation of the bast fibres and especially after recycling of the textile bast fibres.

I therefore decided to collect handmade paper and information of the fibre material and technology used on study tours to Oriental papermakers, followed by systematic microscopic and macroscopic observation and descriptions of the individual papers. Similar to Wiesner's reference material of plant did my reference material of paper serve in identification of the technology and fibre materials used in anonymous Oriental paper.

In 1911 Wiesner's latest analysis of paper was published. It illustrates the development since 1886 of his methods of observation of hundreds of Arab, European, East Turkestan and Chinese paper samples and of his interest in paper and paper history. Not only his usual microscopic observation of the fibre materials combined with chemical analysis of the sizing of the paper are described here, but for the first time also macroscopic observation of the paper material and the technology used is included in his hypothesis of the Chinese origin of rag paper.

## Wiesner's Publikation 1911

- Über die ältesten bis jetzt aufgefundenen Hadernpapiere. Ein neuer Beitrag zur Geschichte des Papiers.
  - Vorgelegt in der Sitzung der Kaiserlichen Akademie der Wissenschaften am 15. März, Wien 1911.
- Wiesner's analysis of the archaeological East Turkestan paper and Chinese paper illustrates that rag paper could not be an Arab invention, dated to the 8<sup>th</sup> century, because paper originating from the 4<sup>th</sup> – 8<sup>th</sup> centuries were discovered by the archaeologists during their excavations in East Turkestan and China.

## Chinesisches Papier des 2. Jahrhundert

- Die Araber sind nicht die Uerfinder des Papiers.
- Es handelt sich nun darum, die Brücke zu finden, welche von dem chinesischen zum arabischen Papier hinüberleitet, um auch zu den ersten Anfängen der Erzeugung des Hadernpapiers hinab zu gelangen.

No Arab paper was found dating from the first 50 years of the Arab production. Therefore no evidence existed of their eventual knowledge about the

Chinese technological development using chemical maceration treatment of new mulberry plants bast fibres combined with limited mechanical treatment. The earliest Arab papers document their choice of rags as fibre material for papermaking similar to the local paper makers in the western part of East Turkestan and the condition of the fibre materials illustrate the use of heavy mechanical treatment to dissolve the rags into individual fibres before the sheet formation.

## Erste arabische Papierbereitung

- Nach den Untersuchung Karabaceks beginnt die arabische Papierbereitung mit dem Jahre 751 n. Chr.
- Bisher wurden nur arabische Papiere gefunden, welche aus dem Jahre 796 stammen.
- Es fehlen aber arabische Papieren aus der Zeit des Beginnes ihrer Fabrikation.

Among the samples from M. Aurel Stein's II expedition to East Turkestan and Dunhuang were samples of a much earlier date than the 4<sup>th</sup> century. The archaeological paper originated from a period close to Ts'ai Lun's presentation of a new writing material in 105 A.D.

## T XII a ii 1 a von Limes

- Man hat in dem Papier von einer verfallenen Wacht-station des alten Limes, westlich von Tunhuang mit einem Fund zu tun, welcher spätestens aus dem 2. Jahrhunderts stammt, also aus der Zeit der chinesischen Erfindung des Pflanzenpapiers. Möglicherweise konnte das Papier noch älter sein.
- Wiesner makes macroscopic analysis of the paper in order to learn about the very sheet formation

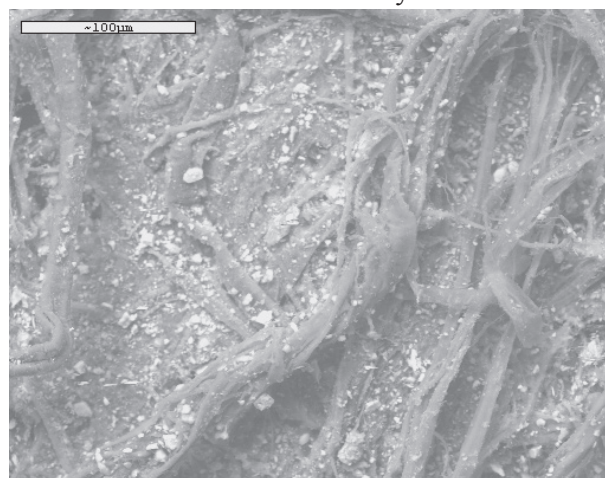


Fig. 9: SEM illustration of the undisturbed surface with still twisted thread fibres from Tocharian B/Brahmi manuscript THT 451 MQ from the Turfan Collection, Berlin

process and notices the technological watermarks – the impression of the laid lines of the mould, the presence of still spun fibres from threads and the fibre sorting and distribution.

## Verschiedene Hypothesen

- Ich kam auf die Vermutung durch die Studium der Textur des Papiers, dass Hadern sehr Frühzeitig zur Erzeugung des Papiers in Anwendung standen.
- Es ist sogar nicht unwahrscheinlich, dass gerade die ersten Versuche, Pflanzenpapier zu erzeugen mit Hadern unternommen wurden [Fig. 9] Tocharian B/Brahmi THT 451 MQ, Turfan Collection, Berlin.

Spun fibres not completely dissolved through the mechanical treatment of the recycled rag fibres are here observed in a manuscript from the Turfan Collection in Berlin. It is most likely spun fibres of similar condition that Wiesner observed in the 2. Century paper from Limes. Wiesner was convinced that the early sample could illustrate the first traces of the original Chinese invention of rag paper, but with only one single sample it was still a hypothesis.

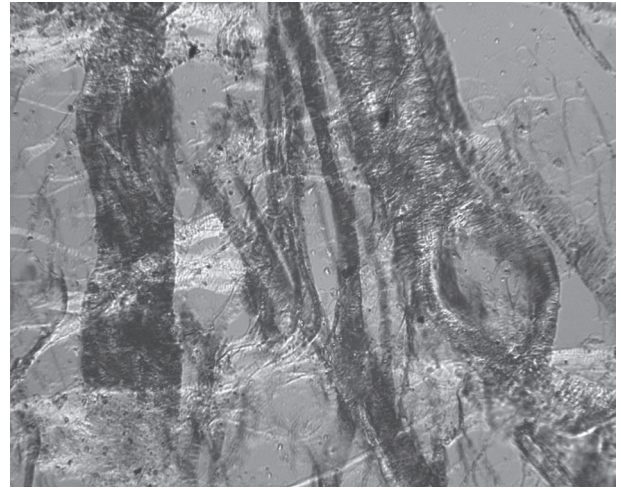
## Vorstufe der Hadernerzeugung

- Die Hypothese über eine Vorstufe der Hadernerzeugung steht auf schwachen Füßen, als das Papier, welche uns hier so beschäftigt hat, ein Unikum ist.
- Einzelne ziemlich intakt gebliebene Fasernfragmente deuten nach Bau auf eine ostasiatische Nesselfaser hin.

The East Asian nettle – also called China Grass or Ramie – was used for textile production in China and East Turkestan. This microscopic observation of fibre material from the Turfan Collection manuscript Sogdian/Manichaean M 765 g illustrates the heavy fibrillation, typical of a pure mechanical treatment of the China Grass fibres [Fig. 10].

## Hadernpapiere des 8. Jahrhundert

- Wenn nun die vorgeführte Hypothese sich als unhaltbar herausstellen sollte, so lehren meine Untersuchungen, dass schon in der ersten Zeit der chinesischen Papiererzeugung ein ausschließlich aus Hadern erzeugtes Papier existiert hat.
- Wiesner hatte Recht in seine Hypothesen.



*Fig. 10: DIC documentation of the heavy fibrillated, pure mechanically treated China Grass fibres, Sogdian/Manichaean M 765 g, Turfan Collection, Berlin*

Hundred years later Wiesner's hypothesis of the origin of Chinese rag paper was documented by the results of the Japanese studies of 8<sup>th</sup> century Chinese paper, excavated in a military camp near Talas and Samarkand in the western part of East Turkestan. Danish studies of archaeological paper from the Turfan Collection reached to the same conclusion. These results of the paper analysis in Japan and in Europe point at the use of rag fibres as raw material for the paper production here and not macerated new paper mulberry fibres as in the eastern part of East Turkestan and China where paper mulberry was cultivated.

The Arabs learned after the battle 751 in Talas to produce paper according to the same method as the local papermakers used in this part of East Turkestan.

Wiesner presented his hypothesis 1911 of the origin of rag paper in China, built on the sample T XII a ii 1 from the 2<sup>nd</sup> century. He could not document this hypothesis, because the earliest Arab paper from the Rainer Collection in Vienna was dated 796. Experiments could have taken place with new plant fibre materials from Persia and Samarkand as an eventual substitute for the paper mulberry plant.

Paper analysis of the huge collection of Dunhuang manuscripts from M. Aurel Stein's II expedition clearly document the difference in the first millennium between the eastern and western paper production in East Turkestan and China, dependent on the local availability of plants for papermaking and the demand of paper qualities. The knowledge of the separation of the bast fibres from plants fit for



papermaking through chemical maceration spread from China to Korea and Japan and neighbouring countries, but this technological development did not replace the use of rag fibres for paper making in the western part of East Turkestan.

This difference is clearly illustrated by the microscopic observation of pure paper mulberry fibres from the Chinese Star Chart S 3326, dated to the 7<sup>th</sup> century from the Stein Collection of Dunhuang manuscripts [Fig. 11]. It is my hope that my paper about Julius von Wiesner's scientific analysis of handmade paper can inspire to read and study his 100 years old important publications.

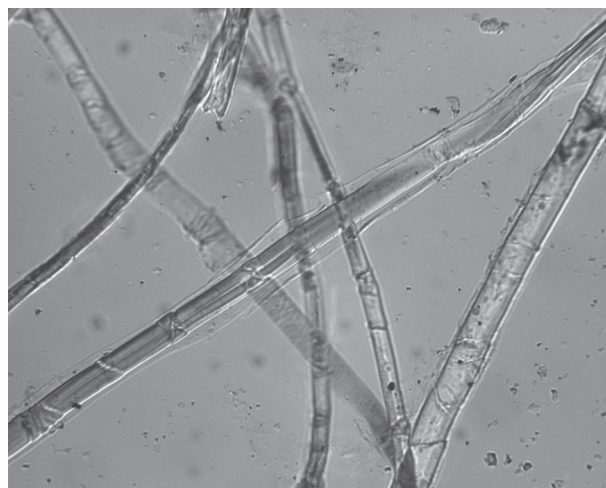


Fig. 11: DIC documentation of separated pure paper mulberry fibres from Dunhuang Star Chart S, the Stein Collection, British Library.

## Delegate news

Claire Bustarret, France

Claire.bustarret@chess.fr

L'Association Française pour l'Histoire et l'étude du Papier et des Papeteries (AFHEPP, President: Denis Peaucelle) has held its General Meeting on February 15, 2014 in the Maison de Balsac, Paris. For more information: <http://afhepp.org/> After the success of the 3-days tour in Ambert last fall, AFHEPP has organized a 1-day visit especially for its members in the papermaking plant of Lana near Strasbourg, including the watermarks production section. A second one will take place on May 14, 2014. AFHEPP has held on March 25, 2014, in Ecole Estienne, Paris, a workshop on "the History and Technique of Shadow Watermarks, XIX-XXth c.", featuring François Banière and Jacques Stouls.

*PapierS* #, the periodical of the French Paper History Association AFHEPP, has been published in January, 2014. The issue comprises articles in French about the "Pelée" paper for artists (L. André), about L.C. Sturm and industrial drawing (B. Dufournier), one on shadow watermarks (J. Stouls), as well as on the function of director of a papermaking plant in 1853 according to G. Planche (D. Peaucelle). Claude Laroque also presents the on-line database "Khartasia". Other publications: Louis André, Alexandra Fau et Denis Peaucelle, *Il était une fois les papeteries d'Esonne*, Archibook & Sautereau éd.,

Paris, 2013, 48 p., ill.

-Michel Boy, Jean-Louis Boithias, *Moulins, papiers et papetiers d'Auvergne, Livradois-Foréz, Ambert, Richard-de-Bas*, Edition des Monts d'Auvergne, 2014, 607 p., ill.

-Claire Bustarret, "Usages des supports d'écriture au XVIII<sup>e</sup> siècle: une esquisse codicologique", *Genesis*, n<sup>o</sup> 34, Dossier "Brouillons des Lumières" sous la direction de N. Ferrand, avril 2013, p. 37-65, ill. (soon available on-line).

-Jérémie Cerman, *Le papier peint art nouveau. Création, production, diffusion*, Editions Mare & Martin, 2012.

-Gérard Coussot, Alain Mingaud, Frank Bernard and Max Colombier, *Cinq siècles de papeteries à Saint-Junien, Le Cahier d'Impact* n<sup>o</sup> 19, dec. 2012.

-*La Correspondance de Concorcet. Documents inédits, nouveaux éclairages. Engagements politiques 1775-1792*, Nicolas Rieucan, Anni Chassagne et Christian Gilain ed., *Analyse matérielle*: C. Bustarret, Centre international d'étude du XVIII<sup>e</sup> siècle, Ferney-Voltaire, 2014. 240 p.

Other events: - AFHEPP members Jean-Louis Estève and Claudine Latron are starting a project to build a loom for laid paper. -Under the title "Le papier se met à table", the Musée du Papier in Angoulême presents an exhibit on the relationship between paper and cooking, from kitchen to the dinner-table (April 16, 2014 to January 4, 2015). -The third conference on "Papermaking

connoisseurship in France and in Japan, 2014” will take place in INHA Auditorium, Galerie Vivienne, Paris, on May 26, 2014 (Musée du Louvre, Fondation d’entreprise Hermès, Mitsubichi Foundation). -On January 24, 2014, the machines of the papermaking plant of Docelles (Vosges) have sadly ceased activity, following a decision of UPM group, although the staff had proposed an alternative cooperative. The papermaking site founded in 1478 had produced paper ever since.

## “The Final Papermakers of the Royal Family of Thailand”

Elaine & Sidney Koretsky, USA  
paperroad@gmail.com

The documentary film in DVD format was shown on October 19, 2013 at the annual Friends of Dard Hunter Meeting at Washington University, St. Louis, Missouri. The film made by Elaine Koretsky and Sidney Koretsky in 1986 and 1987 was based on visits to Bangsoom village, Southern Thailand.



The eminent American paper historian of the early part of the 20th Century, Dard Hunter, had visited Bangsoom Village in 1935 and had documented papermaking by the Niltongkum family consisting of a papermaking grandfather, a papermaking grandmother, and their papermaking daughter Loulin Niltongkum. The papermaking daughter had two very young daughters at that time. These two daughters also became papermakers and we met them in 1986 and they showed us their skills in papermaking, which we documented.

When Dard Hunter visited the Niltongkum family he indicated that this family was the only papermaking family left in Bangsoom Village. When we visited the Niltongkum family 50 years

-The Research Center “Anthropology of Writing” has organized on May 23, 2013, a meeting on “Conservation of written objects” in Paris Ecole des Hautes Etudes en Sciences sociales, gathering conservators, archivists, curators, historians and anthropologists, and featuring among other speakers AFHEPP member Marie-Christine Enshaïan (review in Support et trace, avril 2014).

later we also realized that this was still the only papermaking family left in Bangsoom Village. On September 5, 1986 we were in Bangkok and had rented a four-wheel drive jeep together with a driver and an interpreter. We set out for the paper making village of Bangsoom early that morning. When Dard Hunter visited this family paper workshop, he travelled by water and arrived by boat. However, we travelled by land, located the village, but located the paper mill only after making numerous inquiries. We documented papermaking by the Niltongkum sisters in the following 6 steps:

### 1) The fiber.

The fiber used by the Niltongkum family is obtained from the *khoei* tree, botanically known as *Streblus asper*, which grows in Southern Thailand and in other warm climates in Asia. This tree is a member of the Moraceae family which also includes mulberry, botanically known as *Broussonetia papyrifera*. Khoei fiber had been used for 700 years in Bangsoom Village. Since it was the fiber for making the paper for the Buddhist text, these Buddhist books began to be known as “Khoei books”.

### 2) Preparation of raw fiber.

The raw fiber required stripping, that is the inner bark has to be separated from the outer bark. The





inner bark is used to make the pulp. The outer bark is discarded.

### 3) Cooking.

Cooking the inner bark of the *khoi* tree is the step that follows the fiber preparation. A metal oil drum, which had been cut in half, makes two containers for cooking. The peeled inner bark is placed in the cooker to which both water and wood ash are added. The fiber is cooked until it becomes soft and pliable. Wood is the fuel used to make the fire. After the cooking, the fiber is thoroughly washed with water in order to remove unwanted materials from the solution. The cooked fiber might require 2 to 3 washings to make it clean.

### 4) Beating.

Beating is the step that follows cooking. The cooked and washed fiber is placed upon a hard surface and is beaten by the papermaker who uses 2 wood mallets, one in each hand. The papermaker is seated on the ground as she performs the beating.

### 5) Sheet formation.

Sheet formation is accomplished by the pouring method. The papermaker used a mould, which consists of a teak frame and a cotton woven screen attached to the back of the frame to make sheets of paper by

pouring pulp onto the surface of the mould. The size of the mould is 20" by 60". The mould is divided in half in two sections allowing the papermaker to make two separate sheets of paper during one round of pouring. The papermaker stands in the klong, which in the Thai language means canal, where she forms sheets of paper. After pouring the pulp on the mould, she raises the mould, allowing water to drain through the screen. The papermaker then transfers the mould to her sister sitting on the bank adjacent to the canal. The sister rolls a wood dowel over the surface of the mould. This will result in squeezing more water out of the paper. It will also result in making the paper more smooth, together with the elimination of air bubbles from the new sheet of paper.

Elaine Koretsky was invited by the Niltongkum sisters to make a sheet of paper in the canal. She waited in the canal after she had removed her skirt and replaced it with a sarong which was given to her by the sisters. Elaine succeeded with great difficulty in forming a sheet of paper and concluded that forming a sheet of paper in the klong requires a great deal of practice.

### 6) Drying and burnishing is the next step

The moulds containing the newly formed wet sheets of paper are carried to an area where sunshine and air accomplish the drying. The



length of time needed for drying is therefore variable. After the sheets of paper are dry the surface of the paper is rubbed with a smooth stone, resulting in a smooth compact sheet of paper. The finished paper that was shown to us consisted of black paper and off-white paper. The black paper is used for Buddhist manuscripts and books. The two Niltongkum sisters produced traditionally made paper for the Royal Family of Thailand. We made our second and final visit to Bangsoom Village on December 7, 1987. The Niltongkum sisters were not making paper during our visit. We discussed papermaking with the sisters and learned sadly that the family was in the process of ending their long tradition of generations of making *khoi* paper. We learned that they would no longer be making paper for the Royal Family of Thailand. We sorrowfully said goodbye to the sisters and to the end of making *khoi* paper. Few years later during a visit to the National Library of Thailand we noticed that there was a display of tools, artifacts and papers donated by the Niltongkum Family.



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#### June 11-26, 2014, Workshop: Fabriano, Italy Paper/Print/Book Intensive 2014

Pyramid Atlantic Art Center sponsors “Paper, Print and Book”, an intensive workshop led by artist Lynn Sures in conjunction with Giorgio Pellegrini of the Museum of Paper and Watermark, Fabriano, Italy. The course features two weeks of intensive study at the Museum with time to enjoy the beautiful Marche region. Traditional Italian book arts topics covered will be papermaking, watermark-making, intaglio printmaking, marbling and leather binding. Instruction will be given by noted Italian masters in these techniques, with language interpretation provided by instructor Lynn Sures. Field trips include such medieval cities as Assisi and Gubbio, as well as natural landmarks. This is an opportunity to immerse yourself in the arts and culture of Italy, in a charming, historic city and region renowned for both –and of the beaten tourist path. Contact: [Lynn@LynnSures.com](mailto:Lynn@LynnSures.com)

#### June 14, 2014, Fabriano Watercolour International Prize 2014

The city of Fabriano has announced its third edition of the ‘*International Prize “Marche d’Acqua” Fabriano Watercolour 2014*’, an event that the Tourism Councillorship of the Municipality of Fabriano will open on June 14, 2014 at the Museum of Paper and Watermark in Fabriano. The museum is the ideal site to hold the Italian 3rd International Prize dedicated to Watercolour Art. The biennial exhibition, conceived by the Museum of Paper and Watermark in collaboration with InArte Fabriano and Ava (Venetian Watercolour Association) will welcome renowned and internationally acclaimed artists. The artists participating in the exhibition are from all over the globe, including young emerging artists, selected by the ‘*Accademie di Belle Arti Italiane*’ and the International Art Schools and Academy for their creativity. The works of art will be exhibited and open to the public until August 31 at the new exposition gallery created within the Museum of Paper and Watermark. The exhibition will also exhibit a session dedicated to the works of art by the seven judging panel members of the “Marche d’Acqua” Prize and a special guest session dedicated to *Angus McEwan*,



the winner of the Biennial watercolour Prize 2012.  
[info@museodellacarta.com](mailto:info@museodellacarta.com)

### July 11-17, 2014, Fabriano, Italy Paper/Print/Book Mashup 2014 - a special One-Week "advanced" class

The Fabriano 2014 Mashup is a one week workshop for anyone who has already participated in the regular two-week Intensive and is ready for more fun in Fabriano. The course content will consist of some papermaking and some book arts experiences, as feedback from past participants demands! Information and registration, visit [www.lynnsures.com](http://www.lynnsures.com)

LE CARTARE DI FABRIANO. Società Donne Lavoro nei tempi della città della carta.

From editorial activity of the Pia Università di Cartai borns a volume dedicated to the "Cartare", edited by Gianfranco Fedrigoni Foundation, European Institute of the History of Paper and Paper Sciences. (ISTOCARTA)

The collective work reconstructs the workings of the female component of the workers who helped making the famous "Fabriano" paper throughout the world, and discovers, with appropriate studies and researchers, to what extent the characters of the women affected in social and economic development, rebuilding large historical paths from the middle ages to the modern age, contemporary

age, and in particular with regard to the nineteenth and twentieth centuries. In this context, the women's behavior emerges, showing the long suffering path of the emancipation of women to gain equal duties and rights between the two sexes. It opens up to us the personality of the "Cartare", its humanity, its daily commitment to factory workers and of housewives in the family along with their active presence in the society in which they lived and worked.

The inauguration of the new paper area of the National Museum of Science and Technology Leonardo da Vinci (MUST), Milano (Italy), was held April 4th, 2014, in conjunction with the celebrations of the 750th anniversary of FABRIANO paper. The Paper Area is the project of MUST, who have agreed with FABRIANO paper mill to establish a partnership between the Museum and the Gianfranco Fedrigoni Foundation, European Institute of the History of Paper and Paper Sciences (ISTOCARTA), Fabriano (AN – Italy), who has given full cooperation on the technical and scientific history. For more information: [www.istocarta.it](http://www.istocarta.it)



Fondazione Gianfranco Fedrigoni

ISTOCARTA

Istituto Europeo di Storia della Carta e delle Scienze Cartarie

## Meetings, conferences, seminars, courses and events

June 2-3, 2014

CATS, Centre for Art Technological Studies and Conservation  
 Conference: Studying 18<sup>th</sup> –Century Paintings, Technology & Practice  
 Frederiksberg Palace, Copenhagen, Denmark  
[www.cats-cons.dk](http://www.cats-cons.dk)

June 11-13, 2014

NPH Nordiska Pappershistoriker  
 Annual meeting in Sonderborg, Denmark  
[www.nph.nu](http://www.nph.nu)

June 11-16, 2014

Paper, Print and Book, Fabriano, Italy  
 Workshop: Paper/ Print/ Book Intensive 2014  
[www.lynnsures.com](http://www.lynnsures.com)

June 16 – 17, 2014

ICOM –CC Working Group Art Technological Source Research

6<sup>th</sup> symposium: Sources on Art Technology: Back to Basics  
 Rijksmuseum, Amsterdam, The Netherlands  
[www.rijksmuseum.nl](http://www.rijksmuseum.nl)

July 2 – 3, 2014

IAPMA, International Association of  
Handpaper Makers and Paper ArtistsItaly convents  
Fabriano, Italy  
www.iapma.info

July 11-17, 2014

Paper, Print and Book, Fabriano, Italy

Workshop: Paper/Print/Book Mashup 2014  
One-week advanced class for people who had  
earlier participated in the regular Two-weeks  
Intensive course.  
www.lynnsures.com

August 28 – 31, 2014

DAP Deutschen Arbeitskreis für  
PapiergeschichteTagung in Hameln, Germany  
Frieder Schmidt f.schmidt@dnb.de

October 10 – 12, 2014

BAPH British Association of Paper  
Historians25<sup>th</sup> Annual Conference Exeter, United Kingdom  
www.baph.org.uk

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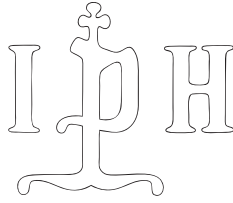
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The IPH gathers professionals of different branches and all friends of paper around the theme of paper history. As an international specialist association it coordinates all interests and activities in this field and provides the necessary means to reach these goals: the periodical “Paper History”, the Congresses, the Congress books and the Supplement series.

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