

# **IOP NEWSLETTER 75**

February 2004

---

## **CONTENTS**

---

**IOP GENERAL COUNCIL MEETING AT IOPC-VII IN BARILOCHE, ARGENTINA**

**LAST CALL FOR NOMINATIONS FOR IOP OFFICERS**

**LAST CALL FOR PROPOSALS TO HOST IOPC-VIII, 2008**

**UPCOMING MEETING**

**NEWS OF THE MEMBERSHIP**

**CARBONIFEROUS PALEOENVIRONMENT PROJECT**

**NEW PALEONTOLOGIC DATABASE WEBSITE FOR FLORISSANT**

**PERSONAL SUBSCRIPTION PRICE FOR RPP**

**BOOK REVIEW**

**PUBLICATON ANNOUNCEMENT**

**OBITUARIES**

---

The views expressed in the newsletter are those of its correspondents, and do not necessarily reflect the policy of IOP.

President: Else Marie Friis (Sweden)  
Vice Presidents: Muriel Fairon-Demaret (Belgium), Zlatko  
Kvacek (Czech Republic), Sun Ge (China)  
Secretary: Gar Rothwell (USA)

## IOP GENERAL COUNCIL MEETING AT IOPC-VII IN BARILOCHE, ARGENTINA

Preparations for IOPC-VII are nearly complete, and the membership will be converging on Bariloche, Argentina in less than a month. In addition to a full program of symposia, presentations, field trips, and other activities <http://www.iopc2004.org/>, the IOP General Council Meeting will be held. Please send any last minute information, announcements, etc. for inclusion in the General Council Meeting to the Secretary of IOP at: [IOP@www.ohiou.edu](mailto:IOP@www.ohiou.edu).

### LAST CALL FOR NOMINATIONS FOR IOP EXECUTIVE

New executive officers will be elected at the General Council meeting to be held at IOPC-VII in Bariloche, Argentina this March. Additional nominations for President, Secretary, Vice-President (total of three), and Member-at-Large (total of three) can be e-mailed to the Secretary at [iop@www.ohiou.edu](mailto:iop@www.ohiou.edu) until March 7, 2004.

### LAST CALL FOR PROPOSALS TO HOST IOPC-VIII, 2008

The location for IOPC-VIII, to be held in 2008 will be chosen at the General Council Meeting to be held at IOPC-VII in Bariloche, Argentina this March. Proposals to host this meeting can be e-mailed to the Secretary at [iop@www.ohiou.edu](mailto:iop@www.ohiou.edu).

### UPCOMING MEETINGS

**The 21st Annual Mid-Continent Paleobotanical Colloquium**: will be held May 14-16, 2004 in Norman, Oklahoma at the Sam Noble Oklahoma Museum of Natural History at the University of Oklahoma. Meeting organizers are Rick Lupia ([rlupia@ou.edu](mailto:rlupia@ou.edu)) and Amy McClain ([amcclain@ou.edu](mailto:amcclain@ou.edu)). Please visit the web site <http://www.snomnh.ou.edu/mpc2004/> for more information about the meeting.

**The XI Meeting of Paleobotanists and Palynologists**: sponsored by the Latin American Association of Paleobotanists and Palynologists (ALPP) and hosted by

the Universidade do Vale dos Sinos (Unisinos) and the Universidade Federal do Rio Grande do Sul (UFRGS), will be held in Gramado, Rio Grande do Sul, southern Brazil, from November 07 - 10, 2004. Please visit the web site [http://www.exatec.unisinos.br/\\_rpp2004/english/](http://www.exatec.unisinos.br/_rpp2004/english/) for more information about the meeting.

### **Paleontological Society hosts a meeting for ANAPS:**

At the recent Annual Meeting of the Geological Society of America in Seattle, the Paleontological Society hosted a meeting for ANAPS. Historically this meeting has been a format for paleontological societies to discuss common issues (which may be a good thing to begin again), but more recently the only business has primarily met to organize the North American Paleontological Convention (NAPC).

I am pleased to announce that the next NAPC meeting will be in Halifax, Nova Scotia in June 2005. David Scott is the Chair of the convention, and the web page can be found at <http://www.dal.ca/~es/napc/napc.htm>. Exact dates will be established soon, and other details are currently being developed. Please invite your members to forward symposia suggestions to David as soon as possible [dbscott@is.dal.ca](mailto:dbscott@is.dal.ca).

Halifax is within two hours of several world-class paleontological sites. This is an exciting venue. I invite you to attend (or send a representative to) the 2004 ANAPS meeting at the Denver GSA, and I look forward to seeing you in Halifax.

William I. Ausich  
Professor of Geological Sciences  
Director, Orton Geological Museum  
President, Paleontological Society

### NEWS OF THE MEMBERSHIP

**Awards to Dr. Shyamala Chitale**: Dr. Shyamala Chitale, Curator of Paleobotany at the Cleveland Museum of Natural History was presented four prestigious awards upon the occasion of her keynote address to the Recent Advances in Botany Conference in Bhandara, India. These awards include:

- A medal for Excellence in Paleobotany from the Birbal-Savitri Foundation in Lucknow, India

- A citation and shawl for Lifetime Achievement and Excellence in the Field of Botany-Paleobotany, from the Birbal-Savitri Sahni Foundation in Lucknow, India
- A plaque in Recognition of Lifetime Merit in Fossil Botany by M.A.C.S. Agharkar Research Institute in Pune, India
- A plaque for Meritorious Achievement in Fossil Botany from the organizing body of the National Conference on "Recent Advances in Botany," sponsored by University Grants Commission of India

More information about Shya's activities is presented at: <http://www.cmnh.org:/pressroom/documents/shya.html>

#### **Johanna H. A. van Konijnenburg-van Cittert:**

Starting November 1st 2003, Johanna H. A. van Konijnenburg-van Cittert has been appointed as part-time professor in pre-Quaternary Palaeobotany at Leiden, the Netherlands. The completely new professorship is a cooperation between the National Natural History Museum 'Naturalis' at Leiden, and the National Herbarium of the Netherlands, Leiden branch.

The research work is mainly carried out at Naturalis. This Museum houses not only its own palaeobotanical collection of ca. 20,000 specimens from all ages and continents, but also since a couple of years the 'Jongmans collection' which was formerly based at the Dutch Geological Survey at Heerlen. This collection encompasses ca. 50,000 registered specimens and about the same amount of unregistered specimens. Half of this collection is from Carboniferous and Lower Permian deposits, both in the Netherlands and from other, mainly European, countries.

The palaeobotanical research at Naturalis (with the help of the curator of Palaeobotany Dr. I.M. van Waveren, and an MSc student Eka Iskandar) centres at the moment around a revision of the Early Permian flora from Jambi, Indonesia. A recent expedition to the area revealed that at least some of the old localities are still available, and some excellent material was collected. Next year, another expedition is planned to study the sedimentology and stratigraphy of the area and collect more material. Preliminary results have been presented at the Carboniferous/Permian conference at Utrecht, August 2003, and more detailed results will hopefully be presented at the coming IOP conference in Argentina. Future scientific work will mainly be dealing with other Late Carboniferous and Early Permian assemblages.

Teaching will take place in the faculty of Biology (research school of Botanical Diversification, located at the Herbarium), but some research is carried out there as well. Dr. R. W. J. M. van der Ham, a well-known pollen morphologist, spends one day a week on palaeobotany and we are at the moment dealing with the plants found in the Maastrichtian type-area (south eastern part of the Netherlands). The conifers have been studied, and the results either have been published or are in press. The present work is on some fungi found in cuticles of one of these conifers; thereafter fossil sea grass material will be studied.

### **CARBONIFEROUS PALEOENVIRONMENT PROJECT**

#### **IGCP Project No. 469 - Variscan terrestrial Biotas and Palaeoenvironments:**

This project is investigating changes in tropical wetland habitats during the late Westphalian and early Stephanian Epochs, focussing particularly on the Variscan and Appalachian Forelands and adjacent Mountains, and the Eastern and Western Interior Coalfields of North America. The aim is to document the decline and virtual eventual extinction of these tropical habitats, which had resulted from uplift and drainage of the wetlands following Variscan tectonic activity. The collapse of this habitat removed a major carbon sink and is thus likely to have had a global environmental impact.

The project will integrate four principle data-sets from across the Variscan area.

1. Sedimentology. This will focus particularly on changes in drainage patterns and the distribution of climatically sensitive deposits (coals, red-beds, etc). Subsidence patterns in the different basins will also be investigated.
2. Coal petrology. Coal petrology will be used to characterize hydrological types of ancient mires and consequently to interpret possible controls (climatic or tectonic).
3. Floras. Macrofloral changes will be examined to determine chronological and geographical changes in the clastic substrate vegetation. Palynology of the coals will be studied to identify changes in the back swamp (peat forming) communities. Palynology of the clastic

deposits will be used to identify overall changes in the wetland vegetation.

4. Faunas. The distribution of terrestrial invertebrate and (where available) vertebrate faunas will be investigated to determine changing biogeographical patterns.

The project will operate around a series of meetings to be held in various centres across the study area. The inaugural meeting was held in August 2003 in Utrecht, as part of the International Congress on Carboniferous and Permian Stratigraphy. The next meeting will be in April 2004, in Sofia. Other planned meetings are in Bucharest (2005) and Prague (2006). A Newsletter is also available (copies from the Project Administrator – [helen.fraser@nmgw.ac.uk](mailto:helen.fraser@nmgw.ac.uk)).

There are four Regional Coordinators of the project: North America – Prof. Erwin Zedrow ([mailto:erwin\\_zedrow@uccb.ns.ca](mailto:erwin_zedrow@uccb.ns.ca)); Western Europe – Prof. Barry Thomas ([bat@aber.ac.uk](mailto:bat@aber.ac.uk)); Central Europe – Dr Stanislav Opluštil ([oplustil@mail.natur.cuni.cz](mailto:oplustil@mail.natur.cuni.cz)); and Eastern Europe – Prof. Yanaki Tenchov ([tadi@geology.bas.bg](mailto:tadi@geology.bas.bg)). The overall project leader is Dr Christopher Cleal ([chris.cleal@nmgw.ac.uk](mailto:chris.cleal@nmgw.ac.uk)). Anyone interested in participating in the project should contact the relevant Regional Coordinator; Dr Christopher Cleal, Department of Biodiversity & Systematic Biology, National Museums & Galleries of Wales, Cathays Park, Cardiff CF10 3NP, UK

### NEW PALEONTOLOGICAL DATABASE WEBSITE FOR FLORISSANT

Florissant Fossil Beds National Monument has launched a new paleontological database website. The database includes all of the type and published specimens for the 1700 species of plant and insect fossils from this late Eocene site in Colorado. The collections from twenty different museums are represented, and new color images for all of the fossils are included. Many of these type specimens have never been illustrated in publication. Users can search separate databases for museum collection data, taxonomic data, and bibliographic information. Digital files for many of the publications are also available. The site's URL is <http://planning.nps.gov/flfo>. For more information, contact [Herb\\_Meyer@nps.gov](mailto:Herb_Meyer@nps.gov).

### NEW PERSONAL SUBSCRIPTION PRICE FOR THE REVIEW OF PALAEOBOTANY AND PALYNOLOGY

Special offer for TSOP members!

Elsevier, publisher of the journal *Review of Palaeobotany and Palynology*, offers annual member subscriptions at a special reduced rate of USD 95.

You can pay by Visa/Mastercard/American Express or by bank draft/personal cheque payable to Elsevier.

Payments together with full address details should be sent to: Femke Wallien, Elsevier, Earth and Environmental Sciences Dept., PO Box, 1930 BX Amsterdam, The Netherlands. E-mail: [f.wallien@elsevier.com](mailto:f.wallien@elsevier.com)

### BOOK REVIEW

Stuchlik L., Ziembinska-Tworzydło M., Kohlman-Adamska A., Grabowska I., Wazynska H., Sadowska A. Atlas of pollen and spores of the Polish Neogene. Vol. 2 – Gymnosperms Red. L. Stuchlik, W. Szafer Institute of Botany, Polish Academy of Sciences, Cracow, 2002, pp.237, 9 figures, 1 table, 82 plates, A4. Price 48 USD. ISBN 83-85444-92-0.

One year after publishing the first volume of the Atlas of Pollen and Spores of the Polish Neogene – vol. 1 - Spores (2001) we were given the second volume of this Atlas with descriptions and illustrations of fossil pollen grains of gymnosperms found in the Neogene sediments of Poland. Numerous taxa were described and many names of genera and species of sporomorphs were validly published according to rules of the International Code of Botanical Nomenclature (2000). It is significant progress in the Tertiary palynology now in comparison with the 1970's when W. Krutsch, the outstanding German palynologist published 'Atlas der mittel- und jungertiären dispersen Sporen- und Pollen- sowie der Mikroplanktonformen des nördlichen Mitteleuropas'. A big part of the names used in the Krutsch's atlas could not be in agreement with the nomenclature rules which are valid now.

The text arrangement in the second volume of the Atlas is the same like in the first one. Morphological types of

the sporomorphs of the gymnosperms are discussed and illustrated by schematic and readable drawings in the introduction part. A list and situation of localities, from which material for palynological investigations was obtained, is published. The stratigraphical table of the Neogene of Poland is a very important supplement of that volume. All the investigated profiles are marked at the table against a background of the chrono- and lithostratigraphic scheme of the northern Paratethyds and the Polish Lowland.

The systematical part contains descriptions of 100 taxa including the most numerous from the family Pinaceae (10 genera with 55 species), two genera with 6 species from the family Podocarpaceae, 1 genus with 10 taxa from the family Sciadopityaceae, 5 genera with 20 species from the Taxodiaceae-Taxaceae-Cupressaceae group, 1 genus *Cycadopites* from Cycadaceae and 4 species, which are new combinations, from the genus *Distachyapites* from Ephedraceae. Genera *Cathayapollis* Ziemińska-Tworzyd<sup>3</sup>o with 10 taxa which are new combinations, and *Taiwaniapollis* Ziemińska-Tworzyd<sup>3</sup>o with one species, described first time, are new from scientific point of view. Diagnosis for genera *Cunninghamiapollenites*, *Cupressacites*, *Inaperturopollenites* and *Distachyopites* were completed. One new species was added in each of three genera: *Keteleeriapollenites*, *Sciadopityspollenites* and *Sequoiapollenites*; and two new species were created in the genus *Cupressacites*. Five new combinations in the genus *Pinuspollenites*, four new combinations in the genus *Distachyapites* and one new combination in the genus *Zonalopollenites* were described. Also new species in genera *Sciadopityspollenites* (1), *Cupressacites* (2) and *Sequoiapollenites* (1) were described.

Type species for each described genus were indicated. Various information, remarks and list of synonyms were given for each genus. Detailed descriptions, botanical affinities, geographical distribution of comparable extant plants, stratigraphic distribution of fossil sporomorphs and its distribution in Poland are given in this book. Each species is included to an adequate palaeofloristic element. Taxa of an arctotertiary element (86) prevail between the gymnospermous taxa. A palaeotropical element is represented only by taxa from family Podocarpaceae (7) and Cycadaceae (1). Nomenclatural problems are discussed in remarks mainly.

The first description of sporomorphs similar to pollen grains of the contemporary genus *Taiwania* Hataya from

the family Taxodiaceae for the European Neogene is worth noticing. *Taiwania* Hataya occurs in southern China and in Taiwan. Macroscopic remains of this genus are distinguished recently in fossil Tertiary floras of Europe as just as remains of *Cathaya* Chun & Kuong endemic plants from southeastern China. Fossil pollen grains similar to pollen grains of *Cathaya* were earlier described as *Pinus haploxylon* type in the most cases.

The most important part of each atlas are illustrations. All the taxa were illustrated by numerous, excellent photographs of pollen grains observed under light microscope and also in many cases under scanning electron microscope. E.g. difficult group Taxodiaceae-Taxaceae-Cupressaceae, and especially the genus *Sequoiapollenites*, were arranged due to observations under a high magnification of subtele structures of the sporomorph sculpture.

The volume contains a correctly composed index of names and beautiful illustration of taxodiaceous forest from a natural locality in North Carolina on the cover.

One should hope for funds for that extraordinarily important work and expect elaborating and publishing the next volumes of the atlas with pollen grains of angiosperms. The expectation is the higher so it is lack of such an elaboration for Europe because the Krutsch's atlas has not been continued after publishing the volume on gymnosperms and part of angiosperms only. Hence, we wish to the authors not only the funds for a continuation their work but also energy and persistence in finishing this excellent work, very useful in many branches of science.

Ewa Zastawniak  
W. Szafer Institute of Botany, Polish  
Academy of Sciences, Cracow  
[e.zastaw@ib-pan.krakow.pl](mailto:e.zastaw@ib-pan.krakow.pl)

## PUBLICATON ANNOUNCEMENT

**Pteridology in the New Millennium:** has been published by Kluwer Academic Publishers. This volume, in honour of Professor B.K. Nayar, is edited by Subhash Chandra and Mrittunjai Srivastava, It covers a wide range of pteridological topics and includes one paper on fossil ferns. More information can be found at the publisher's web site:  
<http://www.wkap.nl/prod/b/1-4020-1128-8?a=1>

## OBITUARIES

### **Professor Carmen Loriga Broglio (1929-2003)** -

Prof. Carmen Loriga-Broglio passed away on February 28<sup>th</sup>, 2003. She studied Pharmacy and Natural Sciences at the University of Ferrara. She became a Professor of Paleontology and Paleoecology in 1980 and from 1983-86 she served as head of the Department of Geology. Since 1957, she was a member of the Italian Society of Paleontology.

For many years, Prof. Loriga-Broglio was the responsible of the Geological Section of the *Annali di Ferrara*, the Journal of the University of Ferrara.

Her research was mostly based on biostratigraphy and paleobiology (systematics, paleoecology of benthic foraminiferous, gasteropods, bivalves and sponges) of sedimentary successions of the Triassic (Dolomites, Hungary), of the Lower Jurassic (Dolomites, Veneto) and the Paleogene (Veneto prealps). She was the coordinator of the research group of paleoecology "Paleobenthos" and local coordinator for the IGCP 203 project (Permian-Triassic boundary). Furthermore, she was responsible for the Italian-Hungarian project (1995-98) on the Lower Triassic and for the IGCP 359, which concluded with a proposal for the Ladinian-Carnian boundary of the Dolomites. She worked on the IGCP 393 project (Neritic events at the Middle-Upper Eocene boundary).

She was always particularly interested in museology and didactics, modernized and integrated the paleontological collections of the Museum of Paleontology and Prehistory "P. Leonardi" of the University and the Museum of Natural History of Ferrara. In addition, she worked as tutor for the Didactics of Geological Sciences for the Emilia-Romagna region and the specialising courses for teachers of the secondary school.

Prof. Loriga-Broglio always loved the botany, and was very much interested in paleobotany. She created schedules of the presence of plant fossils in various formations of the Dolomites for a monograph on the Geology of the Dolomites, written by Prof. Piero Leonardi. In 1995 she became supervisor of a thesis on the Ladinian flora (Middle Triassic) of the Dolomites, in 2000 she agreed to supervise a PhD-thesis on the Micro- and Macroflora of some Middle Triassic plant localities and was coordinator of a project financed by the Natural Science Museum of Bolzano (I) on the 'Fossilagerstätte' of Kühwiesenkopf/Monte Prà della Vacca, with a rich Anisian flora. Sadly she passed away

before she could see either the completion of the PhD Thesis, and of the project. The flora is currently under study. A preliminary account was presented at the European palaeobotanical-palynological conference at Athens, 2002, and the first paper on the flora came out shortly before she died.

Broglio Loriga C., Fugagnoli A., van Konijnenburg van Cittert, J.H.A., Kustatscher E., Posenato R. & Wachtler M. (2002): The Anisian Macroflora from the Northern Dolomites (Kühwiesenkopf/Monte Prà della Vacca, Braies): a first report. *Rivista Italiana di Paleontologia e Stratigrafia*, v. 108 (3), pp. 381-389.

We will remember her and everything she did for palaeobotany in Italy with great respect.

Renato Posenato  
Evelyn Kustatscher  
Johanna van Konijnenburg-van Cittert

**Dr. Karl Mädler (1902- 2003)** - I am sorry to inform you that Dr. Karl Mädler passed away October 22<sup>nd</sup>, 2003. Born in 1902, his life literally spanned a century. Initially trained as a pharmacist, his first professional appointment was at Seifhennersdorf, a small town in Saxony that is well known to palaeobotanists for the site of a rich Oligocene flora. There he gained interest in palaeobotany and applied for a doctoral thesis with Prof. Richard Kräusel at the University of Frankfurt am Main in 1931. Following Kräusel's suggestion, he worked on an exceptionally well-preserved diverse Pliocene flora which was recovered from the construction site of the sewage treatment plant for Frankfurt (well known as „Klärbecken-Flora“). Due to unfortunate circumstances, he was not able to receive his degree at that time, but the results of his work were published as a monograph in 1939 („Die pliozäne Flora von Frankfurt am Main“) in the „Abhandlungen der Senckenbergischen Naturforschenden Gesellschaft, 446“. Applying cuticular analysis to the leaves and including fruits/seeds, this is an early and still important example of a synoptic publication on a Late Neogene flora.

Following the turmoil of the war and post-war years, Karl Mädler became a palaeobotanist with the German Geological Survey (Hannover) in 1955. His attention was directed toward applied research and focussed on „micropalaeobotany“. This led to a number of pioneering contributions on charophytes (starting in 1953), Mesozoic megaspores (Mädler 1955), and Mesozoic palynology. He received his doctoral degree

(Dr. rer. nat.) in 1963 from the Technical University of Hannover with a thesis on spores and pollen from the German Triassic („Die geologische Verbreitung von Sporen und Pollen in der Deutschen Trias“) which was published in 1964 as „Beihefte zum Geologischen Jahrbuch, 65“.

Dr. Mädler's continued interest in macropalaeobotany is documented in monographs on Cretaceous and Tertiary angiosperm floras of Jordan (Bender & Mädler 1969), Greece (Mädler 1971), Central America (Lötschert & Mädler 1975) and Turkey (Mädler & Steffens 1979). He early recognized that angiosperm palaeobotanists were in need of a classification for leaves (Mädler 1940, 1950, Mädler & Straus 1971), but the classification proposed by him (Mädler 1975) was never widely accepted. His last paper is dealing with a Permian flora from Northern Germany and was published at the age of 90. Even at that age, Karl Mädler still regularly attended meetings of the German Palaeontological Society and the group of German-speaking palaeobotanists (APP). When asked, he still liked to help with important informations and advice from his longlasting experience.

Karl Mädler is remembered as a modest man never really boosting himself, but he was well recognized by the community of German speaking palaeontologists. In spite of a number of pioneering contributions to palaeobotany and palynology, his international recognition regrettably always remained limited because he published his work mostly in German; only three out of his 54 publications are in English.

An appreciation of Karl Mädler was published by Benda (1996) in a special issue (200) of the „Neues Jahrbuch für Geologie und Paläontologie Abhandlungen“ at the occasion of his 95<sup>th</sup> birthday. A complete list of Karl Mädler's publications was compiled by Heunisch & Wilde (2003) for the APP-Rundbrief that can be found on the internet ([www.uni-muenster.de/GeoPalaeontologie/Palaeo/Palbot/apptext.htm](http://www.uni-muenster.de/GeoPalaeontologie/Palaeo/Palbot/apptext.htm)). The attached photograph of Karl Mädler in his garden at the age of 80 is from private sources and was passed on by C. Heunisch. W. Riegel has to be acknowledged for commenting the text of this obituary.

Volker Wilde, Frankfurt am Main

**Robert Coquel (1941-2003)** - Robert Coquel was born in Liévin, Pas-de-Calais, northern France. His parents were rather poor, but because of the remarkable intellectual abilities of their son they managed to put

him through a secondary school. He followed without difficulty a secondary cursus at the College of Lens, and obtained in 1958 a bachelor's degree in Mathematics. However, his main interest was in the Natural Sciences and this motivated him toward graduate studies in these fields. At the Faculty of Sciences of the University of Lille he received his master's degree in the Natural Sciences in 1962. Especially interested in palaeobotany, he defended in 1963 a Diploma of Higher Studies of great quality, which dealt with the anatomy of the genus *Sphenophyllum*, for which he obtained the annual University Award given by the Faculty of Sciences. This initial success further propelled him toward palaeobotany. In parallel with the obtainment of higher degrees in Palaeobotany and in Coal Geology, he prepared a Third Cycle thesis entitled “Spores et grains de pollen contenus dans les Stériles du Westphalien C inférieur” that was presented in October, 1965. He was Delegate-Assistant in palaeobotany from 1964 to 1965, which helped him earn a living. Unfortunately, at that time, after better economic conditions at the beginning of the 1960s, times turned hard in northern France, and seldom was employment offered by the University. After serving in the military from January 1967 to April 1968, he was nominated to probation Assistant the 1st May 1968. After the military “baptism of fire”, he was ready to overcome university duties on ‘May 68’. At that time he began his research on Carboniferous palynology that materialized in 1974 with the defense of a notable State Thesis dealing with the palynology of the Carboniferous sequence of the eastern part of the Northern France coal-field. This resulted in his obtaining of the Paul Bertrand Award of the Lille Society of Sciences, Agriculture, and Arts.

From this starting point, his labor had to be shared equally between the three poles to which any Universitarian at that time had to dedicate himself: research, teaching duties, participation in the university administration and general duties. In the research domain, he published about eighty papers devoted to Carboniferous palynology (dispersed and in situ palynomorphs) and macrofloras, mainly of Western Europe and North Africa. Also he paid much attention to his teaching task, which represented a heavy load. He had to teach at all levels, including the preparation to “Agrégation”. It is impossible to sum up all the field trips made during his own weekend time and at his own expense in the northern part of France, to explore all the interesting fossiliferous localities. Several excursion guidebooks were produced by Dr. Coquel. This intense activity allowed him to renew almost totally the

practical works for his students in palaeontology. His great knowledge on this matter was well known and will surely be long remembered at the Lille Geology department. His participation to the university general duties was also important. He was an active member of several commissions, and his participation was polite, incisive and efficient. He could always be relied on, never refusing to assume any part of his duties, even time-consuming parts, like the re-organization of the palaeobotanical library and the collections. He was a member of several ecological associations, including the "Fédération Nord-Nature".

However, still more than his professional merits, which are immense, it is his human qualities that are also worthwhile emphasizing. Those of us who had the opportunity and good fortune to walk with him for awhile realized his great character. Robert Coquel was a frank and upright man who could be compared to the few of his kind. There is no shadow that blemished his life. He was a very well-educated man, was self-effacing, modest about his accomplishments and not the least bit pretentious, and was of noble ambition. He was open-minded, with a reserved intelligence that was only equaled by his immense kindness. Added to all these fine human qualities, he was a loyal and understanding friend.

Present in the laboratory till a fortnight before his death on 22 June 2003, Robert Coquel resisted the debilitating diseases that he faced for several years with enormous courage and great stoicism. Thus, he gave us a final great lesson, by far the most exemplary, which further increased our admiration for him. Robert will be warmly remembered and sorely missed by his friends and colleagues.

Jean-Pierre Laveine (thanks to Dr. Paul C. Lyons)