IOP NEWSLETTER 122

June 2020

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IOP Logo: The evolution of plant architecture (© by A. R. Hemsley)

Letter from the president

Greetings Members,

I am hopeful that you remain in good health as you receive this. All of our lives have been impacted in various ways since our last newsletter due to the Covid 19 pandemic. With sadness, we conveyed recently news of the untimely death of our colleague Brian Axsmith who died from this dangerous virus. A touching eulogy, recorded by Gar Rothwell and Mike Dunn and delivered at the Seattle MPC virtual meeting, is available at https://www.facebook.com/International-Organisation-of-Palaeobotany-543548202500847/, IOP's Facebook page, the MPC homepage and also at:
https://drive.google.com/file/d/1mJj_XzHfEP1MMsb7fvb8kLSQ3onmaGnB/view

As announced in our Circular of May 11th, the IOPC/IPC conference which we had been planning to hold September 2020 has been postponed. The new dates are May 1–7 2021. Registration and abstract deadlines are being adjusted accordingly as posted by the organizers, http://prague2020.cz/. This unusual situation has also delayed our election process for new officers. Your current executive committee has agreed to continue on, until the election which our bylaws dictate to be associated with IOPC. All members who planned to pay membership fees in cash during the IPC/IOPC-2020 are requested to read our announcement below and help us to update our member list.

Another great paleobotanical venue, the European Paleobotanical and Palynological Conference (EPPC), will meet next time in Stockholm. Although it had been planned for 2022, organizers have decided to postpone EPPC as well, to maintain the traditional interval of about two years between successive IOPC and EPPC conferences.

Recent horrific events in my country have thrown light on continuing racial inequalities that permeate traditions in many countries. As a global organization of scientists we want to do our part improve conditions internationally. The IOP Executive Committee are in agreement to adopt the following insertion to our bylaws: **"The IOP welcomes participation by those interested in fossil plants from all walks of life without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or age."** We are committed to listening to, learning from and supporting our members. IOP officers are taking action to educate ourselves about systemic racism so that we can better recognize and address privilege, ignorance, access, and apathy within ourselves and our organization. This inclusivity statement also appears now on the welcome page of our website, https://palaeobotany.org/

To conclude on a positive note, the increasing availability of video conferencing services has made it easier for use to "meet" face to face from distant locations. The successful paleobotanical virtual conference held in Seattle (see report of 37th Midcon-

tinent Paleobotanical Colloquium in this newsletter), is an example of how we may continue to share our research in "regional meetings" that, thanks to modern technology, are more easily accessible to colleagues from abroad.

With best regards, Steve
Steve Manchester (Gainesville, FL, USA), IOP President

Welcome to IOP – our new and returning members in January–June 2020:

Aviwe Matiwane, Grahamstown, South Africa
Philippe Moisan Tapi Universidad de Atacama, Copiapó, Chile
Estella Leopold, University of Washington, Seattle, USA
Miky Lova Tantely Raveloson, Antananarivo, Madagascar
Hemant Sonkusare, Nagpur University, Nagpur, India
Gregory W. Stull, Kunming Institute of Botany, China
Stephanie Zaborac-Reed, University of Washington, Seattle, USA
Feng Zhou, Yunnan University, Kunming, PR China

Membership renewal by cash during IPC/IOPC

For various reasons, some members still pay their membership fees in cash (by themselves or through courtesy of a regional representative attending the conference) during the quadrennial international conferences. This is, of course, still possible. Due to postponement of IPC/IOPC-2020 this type of payment of fees is suspended for 2020. Nevertheless, some memberships would expire at the end of this year without payments. We are aware of this and nobody will be skipped from the list on that account.

However, I have no information who wanted to pay membership fees during the conference renewing the membership which is why I kindly request your help for setting up a list of payment extensions. **Please email me and declare your willingness to pay during IPC/IOPC-2021 in Prague.** Thank you very much for your help.

With best regards,
Lutz
(Lutz Kunzmann, IOP Secretary/treasurer)

Meeting report: 37th Midcontinent Paleobotanical Colloquium (Virtual MPC, 2020), May 9-31, 2020

As a result of the COVID-19 pandemic, the 2020 MPC was not held at the newly renovated Burke Museum on the University of Washington campus in Seattle, Washington, May 1–3 2020, as planned. However, rather than cancel the meeting, Caroline Stromberg and her extremely able crew (particularly Paige Wilson, Alex Lowe, and Elena Stiles) reimagined and reconfigured the meeting as a virtual conference, and hosted the first fully digital scientific meeting in plant paleontology on May 29–31, 2020 https://sites.google.com/uw.edu/mpc-2020/home.

All presentations were pre-recorded by the presenters, and uploaded to a website maintained by the organizing committee, and the entire program was presented as a ZOOM video conference (https://zoom.us/home?zcid=2478). The result was a masterfully configured and effectively rendered experience, that is the most successful MPC to date. At the height of attendance, at least 108 people from around the world were actively participating at one time!

Burke Museum of Natural History and Culture, University of Washington, Seattle

The conference featured an “Online Database Solutions for Paleobotany” workshop (https://sites.google.com/uw.edu/mpc-2020/program?authuser=2#h.p_m5LnAW11iatu), oral presentations, "lightning talk" posters, “coffee hours”, and social events

(https://sites.google.com/uw.edu/mpc-2020/virtual-mpc-2020). Abstracts of the presentations are published at https://sites.google.com/uw.edu/mpc-2020/abstracts-virtual-mpc.

(**Florissantia quilchensis* © Stonerose Interpretive Center, Republic, Washington USA)

Sadly, the Saturday session began with a remembrance and tribute to our colleague Dr. Brian Axsmith of Southern Alabama University. Brian, a stalwart contributor and promoter of plant paleontology, beloved and frequently awarded teacher, and productive Mesozoic paleobotanist, succumbed to the COVID-19 virus on March 5, 2020. For those who wish to view that presentation, the video can be found at https://sites.google.com/uw.edu/mpc-2020/virtual-mpc-2020.

Over the two days of the scientific program there were four oral paper sessions with a total of 22 papers, and two sessions where 21 "lightning talk"/poster presentations were organized in a chatroom format. During the oral sessions an organizer served as host to play a 12 minute pre-recorded video of each talk, which was then followed by live Q&A with the audience (3 minutes).
(https://sites.google.com/uw.edu/mpc-2020/virtual-mpc-2020)

Posters were delivered via pre-recorded "lightning talks" (3 minutes), and, participants were encouraged to peruse the list of posters that interested them the most, watch the lightning talks, and join in on the poster Q&A zoom meeting to discuss the work with the presenter by video conference. Such discussions also continued during coffee hours. The social program was very innovative, alternating between small groups of about 5 participants, with frequent rotations to meet new people as well as old friends, much as we do at traditional conferences, and included competitive trivia questions. Members of the winning team of the Saturday evening trivia contest were awarded with a copy of Paul Kenrick's new book, "A History of Plants in Fifty Fossils".

The attendees voted to hold the 2021 Midcontinent Paleobotanical Colloquium as a physical meeting at the actual Burk Museum in Seattle, Washington during May, giving Caroline an opportunity to show off both the new facilities and her ability to equal her virtual organization with an on-site version.

Burke Museum, Seattle, Washington USA

Attendees also voted to hold the 2022 MPC at the Oak Spring Gardens in Upperville, Virginia (https://www.osgf.org/). This will give Peter Crane the opportunity to bring the Colloquium back to the eastern U.S. and introduce that spectacular facility to the paleo-botanical community.

Oak Spring Gardens, Virginia, USA

Dates and details will be forthcoming as plans are formalized, but we can tentatively plan for the 2021 MPC to be held in April or May, and for the 2022 MPC to also occur at that time of year. For more information about the 2022 venue and/or to have your name added to the e-mail invitation list for that meeting, please contact Peter Crane (peter.crane@yale.edu).

*photos taken from the MPC 2020 and Oak Spring Garden Foundation websites

Gar Rothwell
Ohio University, and
Oregon State University

Now online: "Leaf structure and evolution" in DEAL

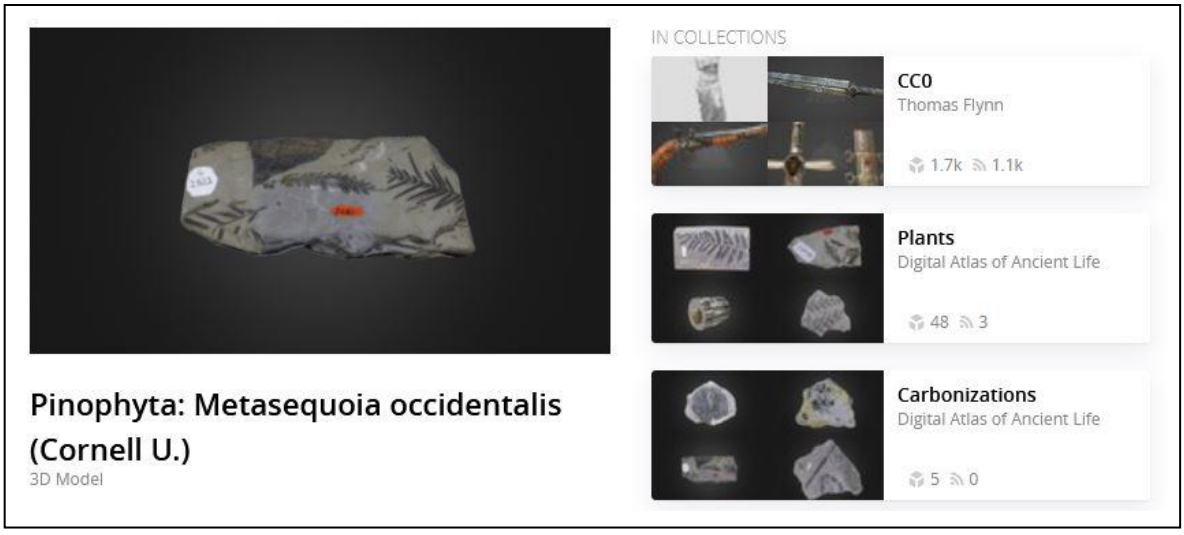
The Digital Encyclopedia of Ancient Life (DEAL), part of the broader Digital Atlas of Ancient Life (DAoAL) project, is an online, open-access textbook currently under development. The goal of DEAL is to produce a comprehensive paleontological textbook with coverage of all major groups of organisms, including plants. The chapter on Embryophytes (by E.J. Hermsen) now includes a core collection of more than 10 pages covering general botanical subjects such as vascular plant structure, leaf structure and evolution, and plant life cycles, with more pages under construction. Most content on DEAL has Creative Commons (CC) licensing to allow educators to use it with limited restrictions.

Additionally, a Virtual Collection of 3D models of fossils for many major groups of organisms can be accessed on the DAoAL website—which includes a user guide with videos—or on the DAoAL Sketchfab page. All models are provided without copyright restrictions (CC0 Public Domain license) and can be embedded into course websites or used for other purposes, including 3D printing.

The Virtual Collection and Digital Encyclopedia can be accessed through the DAoAL homepage: https://www.digitalatlasofancientlife.org/. The virtual collection can also be accessed through the DAoAL Sketchfab page: https://sketchfab.com/DigitalAtlasOfAncientLife. Updates to these projects are posted on social media (Facebook, Twitter) under @PaleoDigAtlas, as well as highlighted on the DAoAL homepage.

We hope you and/or your students may enjoy these resources.

Elizabeth Hermsen, Ithaca, NY, USA



Report: Earth Day 2020: journey through Earth-time

'Journey through Earth-Time'

During Covid-19 lockdown

'The Amphitheatre: Microcosm of the world'

27 March–22 April 2020 & beyond

Do join us on our *'Journey through Earth-Time'* here at The Amphitheatre, our suburban home in Pretoria, South Africa. Over the decades, I've spent time creating a *'Microcosm of the World'*, a sculpture garden' mostly natural, from the myriad rocks brought in from the nearby ridges and from a diversity of plants. Our Journey is an intertwining of science and art, of left and right hemispheres, of ourselves and of the nature around us.

By decree, Lockdown began here in South Africa on 27 March. Since then, I've been outside our front gate only three times—to the pavement just beyond. And no-one, besides my wife Marijke and I, has been through our front-door. Aside from aiming to complete a book on Molteno palaeobotany in this time, I've taken the opportunity—starting on the first day of lockdown--to travel back and forth through Earth-Time--posting an image and accompanying text a day. The photographs are taken mostly that day.

This Covid-19 pandemic, so unique in human history, has had a devastating effect on so many people's lives and on economic activity, local and global. But viewed from the broadest perspective—see below—it might be taken as trivial compared to the Sixth Global Extinction that we humans have set alight.

Let us take the coincidence of the 50th anniversary of Earth Day, 22 April 2020, and this most extraordinary Covid-event, to work together to create a new tomorrow, embracing all humans and the multitude of other species sharing our world.

For *'the children of today's world and the children of tomorrow's world'*—Nelson Mandela (1999), from his endorsement for our *'Gondwana Alive'* project (initiated 1998).

I quote below three pieces from Ellen Palestrant and my book *'A Fantasist & A Scientist In Conversation'*--completed late last year and published January 2020.

Earth Day, 22 April 2020

'Next year, 2020, is the 50th anniversary of Earth Day'

It offers us the ideal symbolic moment to make a global commitment to the most profound change, to a seemingly inconceivable shift! Literally towards achieving the impossible! Talking from within the scientific fraternity, and having been born into that fraternity, we are on the brink of no return, the very edge of the precipice.'—John (p.146)

20-20 vision

'In a specific sense the term refers to perfect vision. .... In a more inclusive sense it takes in contrast, tracking moving objects, depth perception, speed of focus, colour vision. Towards Earth Day 2020, let us expand on the metaphor. Let us picture ourselves on the moon looking down on the Earth—with 20-20 vision, in the most holistic objective sense. We can see both across space and time—back to around 300,000 years ago when our species, Homo sapiens, arose, as if it were yesterday; back to around 10,000 years ago and the Agricultural Revolution; back to 1769 and the Industrial Revolution.'

With our super 20-20 vision, how do we perceive it all? We see an exponential explosion in the human population reaching 7,7 billion today, and we see their spreading uncomprehending "footprint" to every corner of the planet, land and sea. We see the rest of life dwindling rapidly in abundance and diversity, in the grip of extinction. We see the Sixth Global Extinction in startling clarity!'—John (p.147)

Imagined wonder

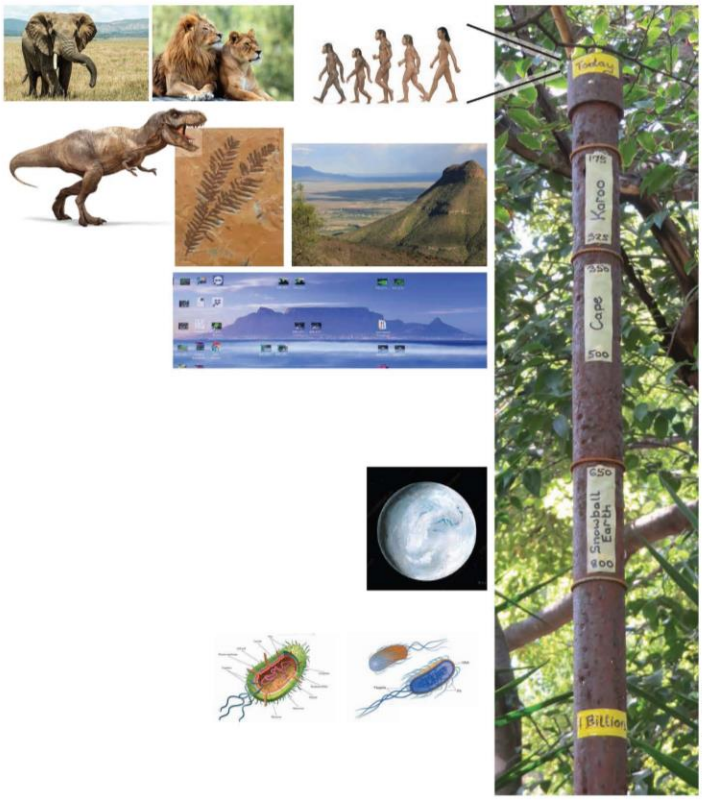
'The wonderful thing about writing fantasy for me is not only the imagined wonder, but the fact that as a writer, I can mirror and investigate both myself, others, and society as a whole, in relative safety. I can highlight through invented characters and worlds, our own world, its inhabitants and their behaviour because fantasy is an extension of reality.'—Ellen (p.154)

John M. Anderson (22 April 2020)

Honorary Researcher Assoc.; *Evolutionary Studies Institute* (ESI), Witwatersrand Univ., Johannesburg.

Associate Prof.; *Africa Earth Observatory Network* (AEON), Nelson Mandela University, Port Elizabeth.

In memory of Maarten de Wit, who passed away unexpectedly on 15 April. For the last 20 years, since 1998, we have worked closely together in evolving our ***Africa Alive***, ***Gondwana Alive*** & ***Earth Alive*** projects! He will be sorely missed!



JMA, 13 April 2020

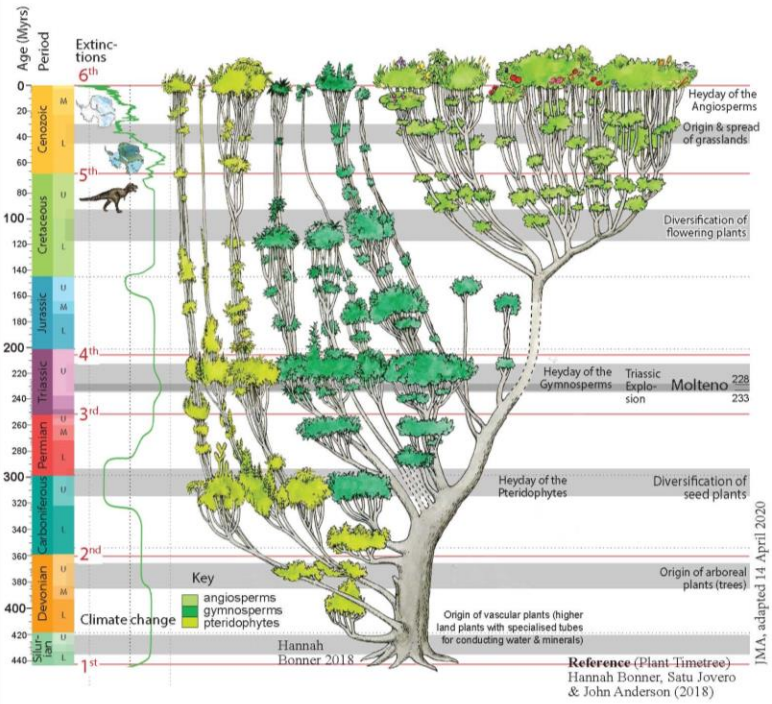
'The last billion years'

—12 April 2020 (Post 17)

See here the upper fifth of our **Earth-Time Pole**, from **1 billion years** ago to the **present**. Marked out on it are Snowball Earth, the Cape Supergroup and the Karoo Supergroup. Each spans some 150 million years.

In the very simplest of terms, our Earth, never still, always changing, froze from around 800 to 650 million years ago. It became a snowball (an iceball). The polar icecaps expanded to meet at the equator. This was a critical turning point. From 4 billion years ago till this moment, life on Earth was microscopic and essentially unicellular—bacteria and their like. After the snowball melted, there was an explosion of macroscopic life, first in the oceans (at c600 myrs), later on land (at c440 myrs). From that melting till today, and through five cataclysmic global extinction events, life has evolved to the splendour seen today.

The Cape and Karoo Supergroups (geological successions) together cover a large part of South Africa. And like palaeontological textbooks, as rich as anywhere globally, they tell a great part of the evolving story of life from c500 to 175 myrs ago. But more of that as we meander through the coming lockdown days.



Reference (Plant Timetree)
Hannah Bonner, Satu Jovero & John Anderson (2018)

JMA, adapted 14 April 2020

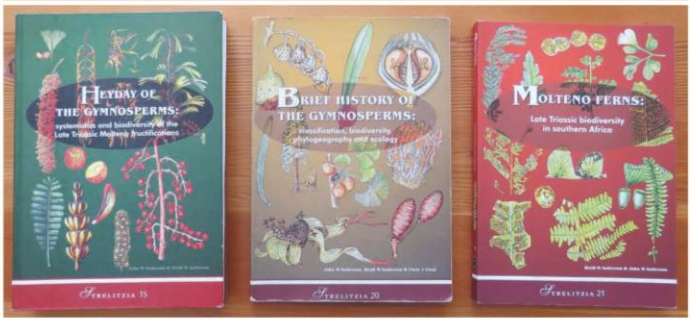
'The Plant Time-Tree'

—13 April 2020 (Post 18)

At Maclear's Beacon marking the highest spot on Table Mountain one finds a small outcrop of glacial deposits. It tells of the end-Ordovician global glaciation; and of the First Global Extinction event (at c444 myrs) affecting macroscopic life following Snowball Earth.

As happens after each of the five global extinction events, given some millions of years, there is a great renewal of life, an explosion of new diversity.

Harmonising science and art, allowing some visual liberty, the **Plant and Insect Time-Trees** sprout atop Table Mt! The roots of those Trees may be imagined growing in the soils atop our '*most iconic mountain*'—at c440 myrs. Before deposition of Table Mt, the continental landscape was bare of visible life; after it's deposition, plant and animal life arose—leading to the majestic diversity we now know.



JMA, 11 April 2020

JMA, 11 April 2020

'Heyday of the Gymnosperms'

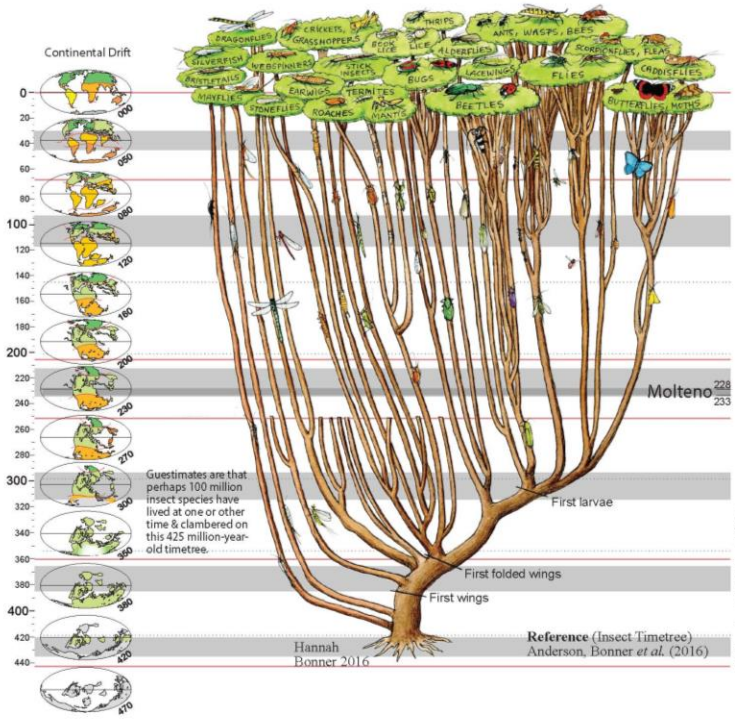
—14 April 2020 (Post 19)

As a hands-on timescale, let us think of our sun and solar system orbiting around the Milky Way galaxy. This takes around 225 to 250 million years—a cosmic year. In approximate terms, the **Molteno Fm** was being deposited one revolution of the galaxy back (and **Table Mountain** about two revolutions back).

So, let's journey back through time from today, the diversity heyday of the angiosperms (flower-bearing plants). One cosmic year back, we find ourselves looking through the Molteno window onto the ***'Heyday of the Gymnosperms'*** (cone-bearing plants). And two cosmic years back, we find ourselves treading the shores of the inland seaway in which the sands of Table Mountain were being deposited. Incredibly there are no plants anywhere to be seen; they haven't yet found a foothold out on land.

Indeed, a considerable amount of change takes place during Earth's galactic orbits.

Top photo: cleaved Molteno slab (Waldeck site), dominated by *Dicroidium* leaves; they hang on our lounge wall.
Lower photo: our 3 Molteno volumes in the SANBI Strelitzia series (2003, 2007, 2008).



JMA, adapted 14 April 2020

'The Insect Time-Tree'

—15 April 2020 (Post 20)

Evolutionary harmony to perfection—as portrayed in these **Plant and Insect Time-Trees** (still requiring much fine tuning)! How good it would be to invite Johann Sebastian Bach (1685-1750) to write an Easter Oratorio around this intertwining story.

Consider just the flowering plants and the pollinating insects, bursting into co-diversity through 140 million years from the early Cretaceous through till today. **The Big Four** pollinating orders—Coleoptera (**beetles**), Hymenoptera (**ants**, **wasps**, **bees**), Diptera (**flies**) and Lepidoptera (**butterflies**, **moths**)--include 80% of the nearly 1 million described insect species around today.

John Anderson, Pretoria, South Africa

Biography: Krishna Rajaram Surange (Dr. K. R. Surange 1920-2010)

Dr K. R. Surange

Krishna Rajaram Surange was born on February 7, 1920 at Ujjain, Madhya Pradesh, India. He was the second son of his parents Shri Rajaram Dhondo Pant Surange and Srimati Sitabai Surange. K. R. Surange completed High School and Intermediate education in 1937 and 1939 from Victoria Collegiate. Young Surange moved to Lucknow for further studies and in *1941* obtained the B.Sc. degree in Botany with Biology and Chemistry and received Master's Degree in Botany in 1943 from Lucknow University.

During his university career he was highly impressed by his *Guru,* Professor Birbal Sahni, F.R.S., and opened his research 'innings' under him and worked on "Morphology of Living and Fossil Cyclanthaceae" and was awarded the Degree of Doctor of Philosophy from the University of Lucknow in 1947. This work is of great significance as South American plants were discovered from the Deccan Intertrappean volcano–sedimentary sequences during a brief interval of the late Cretaceous and early Palaeocene. In 1946, he married Shushila Joshi and after completing his first PhD degree 1947 Prof. Sahni advised him to go to Cambridge School of Botany in England where, under the guidance Royal Society Fellow, Prof Henry Hamshaw Thomas, he worked on coenopterid ferns (Lower Carboniferous) and discovered heterospory in *Stauropteris burntislandica,* one of the earliest fern-like plants, and earned his second PhD degree on the topic "Morphology of *Botryopteris* and *Stauropteris*".

Dr. Surange returned to India in 1949 and Prof Sahni appointed him Reader. However, sadly, Prof Sahni suddenly died on 10th April 1949 after a week laying the foundation stone of the new building of the Palaeo-botanical Institute. Madam Savitri Sahni, who was looking after the affairs of the Institute, appointed Dr. Surange as Assistant Director of the Birbal Sahni Institute of Palaeobotany in 1952, Officer-In-

Charge in 1953 and Director in 1959. Dr Surange held this position till May 1980. Dr Surange was also Head of the Department of Palaeozoic Palaeobotany from 1953 to 1975 and guided 11 students.

Dr Surange has done significant work on the Glossopteris flora and contributed significantly towards the knowledge of Glossopterid group of plants and for the first time undertook the study of taxonomic validation of cuticular features of different genera and carried forward the work started by Prof. Sahni on the cuticular study of *Glossopteris angustifolia*. Dr Surange discovered and described different types of male, female fructifications, seeds, scale leaves and sporangia of Glossopterid and worked tirelessly to understand the morphology and taxonomic status of this group of plants. He documented a new order Glossopteridales with three families. The revision of *Glossopteris* species is his monumental work to sort out the species complex of *Glossopteris*. His book under the title "Indian Fossil Pteridophytes," published by Council of Scientific and Industrial Research is a memorable documentation of the fossil ferns from all the geologic formations of India.

Felicitation of K. R. Surange at BSIP by Chairman J. S. Singh and A. K. Srivastava

During his long career as Director of Birbal Sahni Institute of Palaeobotany Dr Surange nurtured the Institute with care and caution and formed a world class team of different disciplines of palaeobotany and Institute became the world centre of palaeobotanical researches. The Palaeobotany and Palynological Laboratory set up by Prof. Jonker is the testimony of Birbal Sahni institute of Palaeobotany model. Inspite of serious constraints Dr Surange successfully organized International Palaeobotanical Conference to mark the Silver Jubilee celebration of the Birbal Sahni Institute of Palaeobotany in the year 1970/71. The successful deliberation of IV International Palynological Conference at BSIP, Lucknow is a testament to his organizational wisdom.

Recognizing his scientific and administrative excellence, Dr Surange was invited to take on the responsibility as Director of an autonomous research organization, Maharashtra Association for the Cultivation of Sciences (MACS) situated in Pune, Maharashtra immediately after his retirement from BSIP in the year 1980. Dr Surange proved himself and re-organized the Institute as an autonomous organization of the Department of Science and Technology, Government of India and all the facility and financial support were granted as per Government of India rules. Now it is known after its founder as the Agharkar Research Institute and today it is one of the finest centres of agricultural research in India. Dr Surange retired from MACS, Pune in the year 1990 and he finally settled in Lucknow.

Dr K. R. Surange with Prof J. S. Singh, Dr A. K. Srivastava and Mr S. B. Verma (standing)

Dr Surange has received many honours and awards of multiple prestigious academies. Hie was recognized with Fellowship of the Indian National Science Academy, Indian Academy of Sciences, National Academy of Sciences, India and the Palaeo-botanical Society of India. He was awarded the Birbal Sahni Medal of the Indian Botanical Society for 1979. His international connections may be listed as: Membership of the Executive Committee of the World Organization of Palaeobotany, Membership of the International Committee for Palaeobotanical Nomenclature and Chairmanship of the Working Group in Palaeobotany and Palynology of the lUGS Sub-Commission on Gondwana Stratigraphy. Dr Surange was Vice-President of the XII International Botanical Congress, Leningrad, 1975. From an Editorial point of view, Dr Surange's main

contribution was in the nurturing of "The Palaeobotanist", since 1952, an international journal published by the Birbal Sahni Institute of Palaeobotany.

Dr Surange was very modest but very enthusiastic and active during field work. He used to collect and pack the specimens in the field very meticulously. He was very caring and always helpful to his colleagues. He was shy of public function and fancy gathering; once Prof J.S. Singh, Chairman, Governing Body, BSIP arranged his felicitation programme during Foundation Day Function of the Institute in 2004 which he accepted only with lots of persuasion.

Dr Surange spent his retired life in peace and calm and engaged himself in a newly developed hobby of painting; he made several thematic paintings and enjoyed the life with his granddaughter. He left the world peacefully in the morning of 6th January 2010 leaving behind his students, colleagues, friends, well-wishers and we lost a noble scientific soul and true palaeobotanist. Alas! a legacy of fundamental science diminished.

LIST OF PUBLICATIONS OF DR K. R. SURANGE

1948

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1951

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1952

Surange, K. R. The morphology of *Botryopteris antiqua* with some observations on *Botryopteris ramosa. Palaeobotanist,* 1: 420-434.

Surange, K. R. The morphology of *Stauropteris burntislandica* P. Bertrand and its megasporangium *Bensonites fusiform* is R. Scott. *Phil. Trans. R. Soc. Lond.,* 237 (642): 73-91.

1953

Surange, K. R. & Singh, P. The female dwarf shoot of *Walkomiella indica* A conifer from the Lower Gondwanas of India. *Palaeobotanist,* 2: 5-8.

Surange, K. R., Srivastava, P. N. & Prem Singh. Microfossils analysis of some Lower Gondwana coal seams of West Bokaro, Bihar. *Bull. natn. Inst. India, 2.*

1954

Surange, K. R. *Botryopteris elliptica* sp. novo from the Upper Carboniferous of England. *Palaeobotanist,* 3: 79-86.

1955

Surange, K. R. Studies in the Glossopteris Flora of India-2. Equisetales from the Raniga nj Coalfield. *Palaeobotanist,* 4: 83-88.

Surange, K. R. & Lele, K. M. Studies in the Glossopteris Flora of India-3. Plant fossiLs from Talchir needle shales from Giridih Coalfield. *Palaeobotanist,* 4: 153-157.

1956

Surange, K. R. & Srivastava, P. N. Studies in the Glossopteris Flora of India-5. Generic status of *Glossopteris, Gangamopteris* and *Palaeovittaria. Palaeobotanist,* 5 (1): 46-49.

1957

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1958

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Surange, K. R. Studies in the Glossopteris FIora of India-9. A *male* fructification bearing monolete spores from the Lower Gondwana of India. *Palaeobotanist, 6* (1): 47-48.

1959

Surange, K. R. &. Saxena, Y. N. Studies in the Glossopteris Flora of India-lO. *Dadoxylon barakarense* sp. novo from the Jharia Coalfield, India. *Palaeobotanist,* 7 (1, 2): 1-5.

1962

Surange, K. R. & Maheshwari, H. K. Studies in the Glossopteris Flora of India-II. Some observations on *Vertebraria* from the Lower Gondwanas of India. *Palaeobotanist,* 9 (I, 2): 61-67.

Surange, K. R. & Prakash, G. Studies in the Glossopteris Flora of India-l2. *Stellotheca robusta* novo comb.: A new equisetaceous plant from the Lower Gondwanas of India. *Palaeobotanist, 9* (I, 2): 49-52.

Surange, K. R. & Maithy, P. K. Studies in the *Glossopteris* Flora of India-l3. *Barakaroxylon,* a new genus of petrified wood from the Lower Gondwana of India. *Palaeobotanist,* **10** (1, 2): 108-112.

1963

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Surange, K. R. & Maithy, P. K. Studies in the Glossopteris Flora of Ihdia-14. Two new fossil woods from the Lower Gondwanas of India. *Palaeobotanist,* 11 (1, 2): 96-102.

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Compiled and edited by Dr Ashwini Kumar Srivastava and Dr Rashmi Srivastava

In memoriam Wilfrid Schneider (1938–2020)

Wilfrid Schneider (photo from *Claudia Niemz*)

On March 25, 2020, shortly before his 82nd birthday (April 1, 1938), our esteemed colleague Dr. Wilfrid Schneider died.

After studying geology at the Technical University Bergakademie Freiberg (Saxony, Germany), he received there his doctorate in 1967 supervised by Gerhard Roselt. His dissertation thesis was entitled: "Tertiary Cuticulae dispersae – Taxonomy, Facial Statement and Practical Significance of Dispersed Cuticles Made of Lignite of the GDR with Special Consideration of the 2nd Lusatian seam". This work established his reputation as a coal petrographer and palaeobotanist. The topic has fascinated him until spring 2020. Memorable schemes of successions in the Neogene coastal lignite swamps in Lusatia (East Germany) will also stay in our memories.

Professionally, he was drawn to the Lusatian lignite mining area. There, he transferred his facies model – based on coal-petrographic and palaeobotanical facts – into geological practice as an indispensable basis for lignite exploitation untill today. After outsourcing the coal petrology working group from the lignite mining company LAUBAG in 1999, he worked for the laboratory company LAOP in Hoyerswerda (Saxony) until his retirement in 2001, which he supported with his experience to the last.

For Wilfrid Schneider, the applied work tasks for lignite exploitation have to had always priority, but through his field and laboratory work he gained new coal-

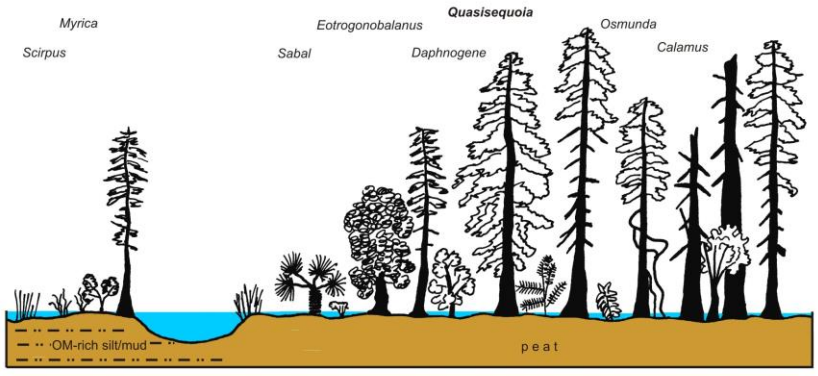
petrographic, phytostratigraphic and palaeobotanical data, which he also published, especially after the political change, in international journals. His scientific legacy includes almost one hundred papers. One of the most important results of his research activities was that he was able to successfully transfer his succession model to other German lignite deposits. Furthermore, he made a meaningful contribution to amber research by the hypothesis that the early Miocene Bitterfeld "amber forest" (central Germany) resembles the Miocene Lusatian coastal lignite swamp forests.

Passing on knowledge and experience to the next generation was a matter close to his heart. He initiated and supervised the doctorate of co-author MD at the Utrecht University. Through the conception of the "Lausitz lignite swamp" in the so-called Tertiary Forest (an arboretum of extant woody plants with relationships to the regional Miocene vegetation) of the Spreeauen Park in Cottbus (East Germany), he gave the general public a vivid insight into the geological history of the region.

It speaks for his understanding of science that he donated his research material, especially hundreds of micro-preparations, well documented to the natural history museums in Dresden and Berlin.

Wilfrid Schneider was a very humble person. He was reluctant to give lectures at international conferences, but he had an enormous amount of knowledge to impart. Personal conversations and discussions at tea and common field work were always a test bed and think tank at the same time. He will stay in our memory as a tireless friendly advisor, a versatile, artistically talented person. During the last years, his main focus of life was the loving care of his sick wife, but when his time and strength allowed, he devoted himself to the lignite. A lot has been left open.
His death is a great loss.

Claudia Niemz, Lauta; Martina Dolezych, Hoyerswerda; Lutz Kunzmann, Dresden; and Jochen Rascher, Freiberg



Scheme of a Paleogene *Quasisequoia* swamp forest in central Germany (Kunzmann, Schneider, Dolezych & Mai, talk at IPC/IOPC-2012, Tokyo)

Job offers

UNIVERSITÄT BONN

DFG RESEARCH UNIT FOR 2685 FOSSILIZATION

Postdoctoral Scientist in Experimental Paleobotany and Plant Fossilification

Applications are invited for the position of Postdoctoral Scientist for research on the experimental fossilization of leaves at the Institute of Geosciences, Department of Paleontology, at the University of Bonn in Germany. We are seeking a young, highly motivated, innovative, and independent researcher with a documented research profile reflected in publications in international journals in experimental paleontology, paleobotany, or microbiology. He or she should hold a recent Ph.D. in Botany, Earth Sciences, Microbiology, or in another closely related field, with technical expertise and research interest in applying experimental methods in plant taphonomy and analytical analysis of biofilms to elucidate the decay and fossilization of leaves in freshwater environments.

Our project on the fossilization of plants is one of eight research projects in a larger Research Unit on Fossilization funded by the Deutsche Forschungsgesellschaft at the University of Bonn. Similar ongoing projects in the Research Unit focus on the decay and fossilization of arthropods and fish in aquatic environments.

The postdoctoral position is initially available for a period of one year, but may be extended for three additional years, pending the results of the second funding period. Salary will be on the TV-L E13 level and will depend on age, marital status, and experience. The Postdoctoral Scientist should be open to participating in all research activities in the paleontological, mineralogical, and microbiological departments of the university, as well as to the close collaboration with the other scientists in Research Unit 2685.

At the Institute of Geosciences, we have excellent facilities for stereo and compound microscopy, SEM, microCT, EPMA, XRD and XRF, confocal Raman spectroscopy, cathodoluminescence, and laser ablation ICP-MS. In allied departments, we have access to laboratories for molecular sequencing and for the analysis of bacterial taxonomy and composition, as well as for chemical and microbial analysis using MALDI-Tof MS and HPLC MS.

The Institute seeks to increase the proportion of female scientists and therefore urges interested female candidates to apply. In case of equal qualification, preference will be given to disabled applicants.

Review of applications begins on June 15, 2020 and continues until the position is filled.

Your application should include a complete CV, list of publications, a description of your past and future research interests, and the names and contact details of three potential referees. This application should be emailed in pdf form to PD Dr. Carole Gee (cgee@uni-bonn.de), Associate Professor of Paleontology, University of Bonn.

Vacancy

Our Mission: Discovering and describing life and earth - with people, through dialogue.

The Museum für Naturkunde - Leibniz Institute for Evolution and Biodiversity Science is an excellent and integrated research museum within the Leibniz Association. Its activities cover and tightly link the fields of collection-based research, development of collections and public engagement with science.

Position: Researcher in palaeobotany (f/m/d)

Work schedule: Full-time

Duration: from 01.01.2021, initially for 24 months

Salary level: E13 TV-L; This translates to a monthly gross salary level ranging from 4002,26€ - 5798,14€, depending on qualification and experience of the candidate. In addition to the salary, the contract includes health care and social security benefits.

Code: 39/2020

Responsibilities:

The Museum für Naturkunde Berlin provides an excellent research environment. It houses comprehensive and excellent palaeobotanical collections as well as an herbarium, state-of-the-art laboratories for palaeontological preparation, 3D-visualization (including its own CT scanner), histology, molecular genetics and computation. Numerous independent research groups are working in a wide range of research fields including palaeobiology, evolutionary biology and biodiversity research.

- Collection-based research with main focus in palaeobotany, preferably with interdisciplinary references to the respective research foci of the science programme Evolution and Geoprocesses at the MfN, such as biodiversity dynamics, evolutionary morphology and/or developmental biology/palaeontology; Integration of phylogenetic methods and botanical research is desirable.
- The jobholder will be in charge of the supervision, as well as the strategic research development of the palaeobotany collection.
- This includes the leadership of staff and of collection visitors.
- Further tasks include engagement in grant applications as well as training and supervision of undergraduate and graduate students as well as postdocs.
- An integration in the teaching of botanic courses at the Humboldt University Berlin is expected (2 SWS; 1 SWS equals 45 minutes teaching time).

Requirements:

- Completed university education in a relevant field of biology or geosciences with research focus in palaeobotany, including an excellent dissertation in one of the named fields
- Own research agenda with profound collection-based research experience in palaeobotany (especially in taxonomy, morphology and phylogeny), palaeoecology and, if applicable, in botany
- Profound knowledge and research experience in palaeobotany, demonstrated by means of international publications
- Experience in maintaining and developing natural history collections
- Demonstrated experience in leading and supervising research projects
- Experience and ability to work in an interdisciplinary team, networking skills
- Intercultural competence, leadership skills
- Experience in the acquisition and management of third-party-funded scientific grants is desirable
- Teaching experience or contributions at the university level is desirable
- Excellent skills in German and English (spoken and written)

Special notes:

In support of equal rights applications from qualified women are particularly welcome. Handicapped individuals will be given preference in cases of identical qualifications.

We look forward to receiving your application with the usual documents (cover letter, curriculum vitae, certificates) by **31.07.2020**, preferably via our online application portal.

For information on the application procedure, please contact recruiting@mfn.berlin

Further informations:

Privacy Policy:

By sending your application, you provide us with your information for the purpose of processing your application by the Museum für Naturkunde. Your data will be kept strictly confidential at all times. Once we have received your application documents, they will be entered into our database. Your data will be stored on our server. In doing so, we observe the provisions of the data protection laws.

Information about the handling of applicant data at the MfN (in German)
and
Privacy policy for the MfN website (in German)

Family Policy:

The Museum für Naturkunde has set itself the goal of promoting a work-life balance and has been awarded the certificate berufundfamilie audit of berufundfamilie gGmbH - an initiative of the Hertie Foundation.

Further information can be found under:
https://www.museumfuernaturkunde.berlin/en/uber-uns/jobs-und-karriere/arbeiten-am-museum-fur-naturkunde/reconciling-work-and-family-life-audit

Upcoming meetings

15th International Palynological Congress / 11th International Organisation of Palaeobotany Conference (IPC/IOPC-2020) Prague, Czech Republic

POSTPONED to May 1–7 2021

Please visit the website for further information, registration and abstract submission:
http://prague2020.cz/
We look forward to welcome you in 2021 in Prague to the conference.
Best wishes,
The Organizing committee

15th Climatic and Biotic Events of the Paleogene (CBEP-2020) Bremen, Germany

POSTPONED to 2021

Please visit the website for further information:
https://www.marum.de/Forschung/Climatic-and-Biotic-Events-of-the-Paleogene-2020.html
2nd circular available / abstract submission started / early bird registration until April 30 2020

15th International Workshop on Plant Taphonomy, Urweltmuseum GEOSKOP, Thallichtenberg, Germany, November 6–8 2020

Decision on holding the workshop this year or postponement will be made in August.

Disclaimer:

Newsletter edited by Lutz Kunzmann & Steven Manchester.

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

Newsletters are regularly issued in February, June and October every year.

Please send us your contributions for the next edition of our newsletter (123) until end of October 2020. Contributions should be sent to Lutz.Kunzmann(at)senckenberg.de.

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 *https://www.instagram.com/explore/tags/paleobotany/?hl=en*