

The 10th European Palaeobotany and Palynology Conference-2018, Dublin, Ireland - Swati Tripathi*, Srikanta Murthy & Anju Saxena, Birbal Sahni Institute of Palaeosciences (BSIP), 53 University Road, Lucknow-226007, Uttar Pradesh, India (*Email: swatidixit26@gmail.com)

The 10th European Palaeobotany and Palynology Conference (EPPC), which is one of the prestigious meets in the field of Palaeosciences, organized once in four years, was this time held at University College Dublin, Dublin, Ireland from 12th to 17th August, 2018. The conference was organized jointly by the University College Dublin (UCD); Trinity College Dublin (TCD); UCD Earth Institute; National Botanic Gardens of Ireland and National Museum of Ireland. The societies supporting EPPC 2018 includes the Linnean Society; the Botanical Society of America; the International Federation of Palynological Societies, International Organization of Palaeobotany; the Palaeontological Society and International Association of Wood Anatomist. The theme of the conference highlights multi- and interdisciplinary in palaeobotanical and palynological research, past, present and future. EPPC aim to showcase disciplinary diversity in palynological and palaeobotanical research through themed and open sessions, via demonstrations of new technology platforms in a dedicated exhibition space and during post-conference field excursions. EPPC welcome reception was held in the evening of Aug 12th at prestigious Trinity College Dublin. Three mid-conference tours and five post-conference tours were also offered to the participants to different academic and tourism sites of Dublin.

Scientific programs comprised of Plenary, Keynote Sessions (invitation only) and Special Sessions (oral and poster presentations); About 600 participants from different corners of the world were invited to present their research findings in the form of oral as well as poster presentations. The inaugural session of the conference was presided by the chairperson of Organizing Committee, Prof. Jennifer C. McElwain, Chair of Botany, Trinity College Dublin and learned plenary speakers like Prof. Pete Coxon; Prof. Jane Stout and Prof. Caroline Stromberg. Prof. Pete Coxon, initiated the Plenary Session by delivering a talk on 'the Tertiary and Quaternary vegetation history of Ireland'. He emphasised on the fact that majority of Irish Pleistocene temperate stage deposits are believed to be related to one stratotype sequence (the Gortian). The latter are characterized by a Holsteinian (MIS 11) style vegetation succession but attempts at dating suggest the deposits may be younger and may indicate the repetition of Holsteinian style vegetation succession in more than one interglacial. Prof. Jane Stout of Trinity College Dublin delivered an interesting talk on 'Palynology from the perspective of a pollination biologist' In her talk, she stressed on the study of pollen which contributes to several scientific disciplines including biostratigraphy, taxonomy, melissopalynology, archaeological palynology and even forensics, linking the accused to a victim and a place, and methods can be shared across disciplines. She elaborated that for the pollination biologists, the study of pollen can help us to understand plant evolution, breeding systems and gene flow, as well as pollinator behaviour, foraging, diet and response to landscape. Prof. Caroline Stromberg of University of Washington presented a talk in the Plenary Session, which focussed on 'the evolution of grasses and grasslands'. She opined that in recent years, plant silica (phytoliths) has emerged as an alternative means of tracking grass and grassland evolution. In the summarizing phase of her lecture, she proposed that region by region studies integrating

multiple lines of evidence are required to test what factors contributed to the unrivalled success of the grass clade. The plenary session was followed by Keynote talks which were further succeeded by oral and poster presentations under four broad topics: 1) Palynology/Stratigraphy; 2) Palaeobotany/Biogeography; 3) Evolution/Extinction and 4) Palaeoenvironment/Palaeoecology/Palaeoclimate. These broad topics were further categorized into 35 Special Sessions.

Scientists from the Birbal Sahni Institute of Palaeosciences, Lucknow, India presented their research findings which were well appreciated by researchers working on different aspects of palaeobotany and palynology. The BSIP group includes, Dr. Srikanta Murthy, Dr. Anju Saxena, Dr. Swati Tripathi, Dr. Nivedita Mehrotra, and Mrs. Jyotsana Dubey. The other two Indian Scientists from Nagpur includes Dr. Bandana Samant and Dr. Dashrath Kapgate. Thus, total seven delegates from the field of palaeosciences represented India in EPPC-2018.

Dr. Anju Saxena, reviewed and synthesized the Permo-Carboniferous biodiversity and phytogeographic distribution of Sphenophytes in India, that these Sphenotypes are less diversified in the southern Gondwana continents in comparison to their profuse diversity in northern hemisphere. Dr. Swati Tripathi spoke about the detailed pollen morphology of four *Ceiba* species growing in India including one hybrid, *C. x insignis* (cross between *C. insignis* and *C. speciosa*) using Field Emission Scanning Electron Microscope (FESEM), Confocal Laser Scanning Microscope (CLSM) and Light Microscope (LM) to highlight the taxonomic characterization of these species and document finer morphological details to correlate them with other *Ceiba* spp., growing around the world. Dr. Srikanta Murthy presented a poster entitled 'Early Permian Palynomorphs and their palaeoclimatic implication: a case study from Rajmahal basin, India', where he focussed on the occurrence of fossil spore tetrads and dyads from earliest Permian that suggests the prevalence of extreme cold conditions during the deposition of the Talchir Formation as a consequence of Carboniferous glaciations followed by deglaciation at the beginning of the Permian period. Dr. Bandana Samant of Rashtrasant Tukadoji Maharaj Nagpur University, India has also organized 'special session 12' on the topic entitled 'Palaeobotany and Palynology of the Deccan Intertrappean Beds, Late Cretaceous to Paleocene of Central India', in which four lectures were delivered.

This conference provided an excellent opportunity to the young scientists to present and discuss their work among an interdisciplinary and international scientific community concerned with palaeobiodiversity and palaeoclimate. Existing international collaborations were reviewed with further synthesizing of fresh collaborations requiring holistic research approach.

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