Kamil Czuchrowski

The British Toxicology Society (BTS) Annual Congress 2024, held at the Spine in Liverpool, was a remarkable event that brought together experts and enthusiasts from the field of toxicology. The congress kicked off on April 15th with a series of educational and engaging sessions.

The congress was inaugurated with a welcome address by BTS President Professor Brian Lake, followed by a plenary lecture by Professor Frank Kelly from Imperial College London, who provided deep insights into the Air Pollution and Public Health. His talk shed light on emerging hazards and an improved understanding of risk, setting a thought-provoking tone for the congress.

The scientific sessions were a blend of traditional and innovative topics. The Continuing Education Programme focused on Endocrine Disruption, with experts like Dr. Hollie Blunt and Dr. Richard Haworth presenting their latest findings. The symposium on Female Reprotox Regulatory Needs were particularly enlightening, discussing the slow transition from in vivo to New Approach Methodologies (NAMs) for regulatory assessments.

Different lectures on female reproductive toxicology at the 2024 Congress was an indication to the growing recognition of this critical area within the broader field of toxicology. Historically, the complexity of female reproductive biology has posed significant challenges for researchers, leading to a slower progression in understanding the toxicological impacts compared to other areas. However, the insightful sessions at the congress highlighted that momentum is building, as the scientific community acknowledges the unique and pressing need to address these complexities.

The difficulty in studying female reproductive toxicology stems from the intricate interplay of hormones, reproductive cycles, and physiological differences that require sophisticated models to accurately assess risks and effects. The symposium showcased cutting-edge research and methodologies that are pushing the boundaries of what's possible in this domain. Speakers presented innovative approaches, such as advanced in vitro models and computational tools, which are beginning to unravel the nuances of how toxicants affect female reproductive health.

Different sessions highlighted the importance of considering sex differences in toxicological evaluations, which has often been overlooked in the past. This shift in perspective is crucial, as it acknowledges that women may experience different health outcomes from exposure to certain chemicals, requiring tailored risk assessments and regulatory frameworks. The enthusiastic participation and the quality of discourse reflected a collective commitment to advancing this field. It was evident that the community is eager to bridge knowledge gaps and develop more predictive models that can inform safer chemical design and use.

As a participant, I found the sessions not only informative but also inspiring. The dedication of the researchers and the collaborative spirit of the congress fuelled my enthusiasm for contributing to this expanding field. Several discussions emphasized the real-world implications of our work on women's health and well-being.

The congress provided ample opportunities for networking, allowing me to connect with peers and industry leaders. The discussions during the poster sessions were intellectually stimulating and offered a chance to explore potential collaborations.

I had the privilege to present my poster on aerosol application of SDS to MucilAir™, which was well-received by the audience. The feedback and questions raised were constructive and will undoubtedly contribute to the refinement of my ongoing research.

The BTS Annual Congress 2024 was an invaluable platform for professional growth and knowledge exchange. The sessions highlighted the importance of multidisciplinary approaches in toxicology and the need for innovative research methodologies. I extend my gratitude to the BTS for the bursary making it possible for me to attend the Congress.