# Federation of Myanmar Engineering Society (Fed. MES)'s World Water Day 2024 Celebration

Seminar on "Water for Peace Innovators: Engineering a Sustainable Water Future for Peace";
"အင်ဂျင်နီယာဆန်းသစ်တီထွင်ပေါင်းစပ်မှုဖြင့် ငြိမ်းချမ်းရေး နှင့် ရေရှည်တည်တံ့သော ရေအနာဂတ်ကို ဖော်ဆောင်ကြပါစို့"

Presentation Title: "Engineers Shaping a Future of Water for Peace: Innovating the Blueprint for Global Harmony"

Speaker: Prof. Dr. Khin Ni Ni Thein, Fellow of Fed. MES, Founder and Chair of Myanmar Water Academy, G100 Ecocivilisation Wing Myanmar Country Chair

## ABSTRACT

This seminar talk by Prof. Dr. Khin Ni Ni Thein aims to establish an effective communication among all Myanmar engineers on the subject of the role of engineers in crafting a sustainable future with a focus on Water for Peace by both male and female engineers. Hope to contribute significantly advancing this dialogue and inspiring action within the Myanmar engineering community. Also to reintroduce Hydroinformatics as it was created by Prof. Dr. M.B. Abbott (IHE, Delf) in 1991 and later co-developed by the International Hydroinformatics Community. It's essential to recognize the interconnectedness of water management, peacebuilding, and sustainable development, and to empower engineers to lead in finding innovative solutions to these complex issues. The multi-dimensional nature of water management and the interconnectedness of various disciplines in addressing this critical issue requires innovative solutions rooted in water sciences, encompassing natural, social, and spiritual dimensions, are indispensable for nurturing peace and sustainability. Access to clean water stands as a cornerstone of human rights and societal stability. Engineers occupy a pivotal position in crafting sustainable water infrastructure to uphold equitable distribution and conservation of this invaluable resource. Technologies such as desalination, water recycling, and smart management systems including AI herald a paradigm shift in combating water scarcity and conflict.

Simultaneously, gender equality, water diplomacy, and spiritual enlightenment, fostering empathy and compassion, stand as indispensable pillars alongside technological advancements. Recognizing the holistic nature of water management, embracing diversity, and fostering inclusivity are vital for fostering resilience and harmony in our societies. We utilize Hydroinformatics tools as integral components in this endeavor. By intertwining scientific innovation with social and spiritual awareness, we can forge a path towards a future where clean water serves as a beacon of unity and prosperity for all. By harnessing innovation and

cooperation, we can engineer a future where access to clean water becomes a catalyst for peace and prosperity on a global scale. The cornerstone of this vision lies in the evolution of Hydroinformatics, for example, https://www.un-ihe.org/department/hydroinformatics-and-socio-technical-innovation, involving both the technical and social aspects of development of new kinds of Decision Support Systems, representing a new phase in water management. This innovative approach integrates advanced computational techniques with water science and engineering principles to enhance decision-making processes. By embracing innovation and cooperation, we can engineer a future where access to clean water becomes a catalyst for peace and prosperity, societal wellbeing and environmental harmony on a global scale.