

atmosphere and/or for the evaluation of their efficiency. It may be also used to evaluate the performance of other software that simulates such flows. ■

References

- [1] Yannopoulos, P.C. (2006). An improved integral model for plane and round turbulent buoyant jets. *J. of Fluid Mech.*, 547:267-296.
- [2] Yannopoulos P.C. & Bloutsos A.A. (2012). Escaping Mass Approach for Inclined Plane and Round Buoyant Jets. *J. of Fluid Mech.* 695: 81-111.
- [3] Christodoulou, G. C., Yannopoulos, P. C., Papakonstantis, I. G., Bloutsos A. A. (2014). A Comparison of Integral Models for Negatively Buoyant Jets. *Proc. 7th Int. Symposium on Environmental Hydraulics 2014 (ISEH VII)*, Singapore (in CD-ROM).
- [4] Yannopoulos, P.C., Noutsopoulos, G.C. (2006a). Interaction of Vertical Round Turbulent Buoyant Jets. Part I: Entrainment Restriction Approach. *J. of Hydr. Res.*, 44(2):218-232.
- [5] Yannopoulos, P.C., Noutsopoulos, G.C. (2006b). Interaction of Vertical Round Turbulent Buoyant Jets. Part II: Superposition Method. *J. of Hydr. Res.*, 44(2):233-248.
- [6] Pani, B., Dash, R. (1983). Three-dimensional single and multiple free jets. *J. Hydraul. Eng.*, 109(2), 254-269.
- [7] Hodgson, J. E., Moawad, A. K., Rajaratnam, N. (1999). Concentration field of multiple circular turbulent jets. *J. Hydraul. Res.*, 37(2):249-256.
- [8] Yannopoulos, P.C. (2012). Unique superposition solutions of multiple plane or round buoyant jets for tracer and buoyancy fluxes. *Journal of Environmental Engineering* 138(9):985-989.
- [9] Yannopoulos, P.C. (2017). Unique Superposition Solution of Multiple Plumes' Flow via Mean Kinetic Energy Fluxes. *J. Hydraul. Eng.*, 143(9): 06017015-1-7. DOI: 10.1061/(ASCE)HY.1943-7900.0001361.
- [10] Reichardt, H. (1943). On a new theory of free turbulence. *Aeronaut. J.*, 47(390):167-176.
- [11] Batchelor, G. K. (2000). *An Introduction to Fluid Dynamics*, Cambridge, U.K.
- [12] Yannopoulos, P.C. (2011). Integral Model for the Reattachment of Two Interacting Turbulent Buoyant Jets. *Proc., VII Int. Symposium on Stratified Flows (ISSF 2011)*, Rome, Italy; Editors: A. Cenedese, St. Espa, R. Purini; No. 1239, pp. 1-8.
- [13] Lai, A. C. H., Lee, J. H. W. (2012). Dynamic interaction of multiple buoyant jets. *J. Fluid Mech.*, 708, 539-575.
- [14] Yannopoulos, P. C. (1996). Superposition model for multiple plumes and jets predicting end effects. *J. Geophys. Res.*, 101(D10), 15153-15167.
- [15] Yannopoulos, P.C. (2010). Advanced integral model for groups of interacting round turbulent buoyant jets. *Environ. Fluid Mech.* 10(4):415-450.

A CALL TO ALL IAHR MEMBERS TO VOTE ON OUR REVISED CONSTITUTION AND BYLAWS

Dear IAHR Colleagues,

Firstly many thanks from the Secretariat and Executive Committee - many thanks to you for your feedback over the years and to the Task Force members who have put hundreds of hours into researching and developing the revisions to our Constitution and Bylaws.

On behalf of the IAHR Council, we are pleased to submit for your review and approval a revised Constitution and Bylaws. This has been a 3-year endeavour and has sought input from YPNs in different regions, Technical Committees (twice) and Regional Divisions (twice) as well as past members of Council and our Institute Members.

The objectives are simple:

1. Ensure IAHR can be nimble and responsive to members needs and initiatives
2. Link the IAHR activities, actions and members more directly to leadership decisions
3. Enhance the attractiveness of IAHR to early career researchers and engineers.
4. Resolve inconsistencies or previously adopted changes that have not been formally included in the Bylaws and Constitutions that have arisen over the past few decades.

The full text of the proposed Constitution and Bylaws can be accessed online [click here](#)

In order to facilitate your review, the main changes are summarised below:

1. The President serves one 2-year term and one 2-year term as past president (rather than the current 2x2-yr terms).
2. The Council will be expanded to include chairs of Technical Committees (TCs), chairs of Working Groups and Journal Editors. Regional Divisions will continue to be represented on Council.
3. The Council will meet every 2 years (at the World Congress) but it is expected that there will be Task Forces and other activities structured between Council meetings. The Council may also convene on-line meetings as necessary. The Council will also include one YPN member from each Region with IAHR support to participate.
4. The creativity and innovation of IAHR will be driven by Council. The more operational 'Business of IAHR' will be entrusted to the Executive Committee with a responsibility of reporting to Council regularly.
5. Vice-Presidents and Presidents will be elected as normal IAHR practice
6. These changes would take effect in 2021
7. There is no change to Technical Committees, Regional Divisions, YPNs or Working Groups.

On behalf of the many contributors, we invite you to indicate your approval of these changes via the option that is included in the electronic ballot for the IAHR Elections: The ballot shall be available to you by email and shall open from July 4th to September 4th. The results of the ballot shall be announced on September 5th.

For more information about IAHR governance, we invite you to visit www.iahr.org and click on about -> governance. If you have any questions, please do not hesitate to contact Elsa Incio at elsa.incio@iahr.org

Thank you for your attention to this matter that is critically important to the future of our Association.

Peter Goodwin
President

Tom Soo
Executive Director