

**MORPHOLOGICAL REPRESENTATION OF DRAINAGE  
NETWORKS, IMPLICATIONS ON SOLUTE TRANSPORT AND  
DISTRIBUTED SIMULATION AT THE BASIN SCALE**

By

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A thesis submitted to the National University of Colombia, Department of Geosciences and Environment in partial fulfilment of the requirements for the degree of Doctor in Engineering

Medellín – Colombia, 2015

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# ACKNOWLEDGMENTS

At the end of this stage in my academic and professional life it is easily to realize that getting this achievement is not only a result of my own efforts. A Spanish version of this section would be definitely fairer given my limited skills for English, but I hope the upcoming lines will be enough and clear to recognize and give thanks for all the support coming from different persons, in different ways and different moments.

Stream water quality issues were perhaps the initial and motivational topic I deal with during this long and endless path. This had not been possible without the support I received from Professor *Mauricio Toro Botero*, who took me in adoption (academically) together with my partner and friend *Carlos Restrepo*. It is grateful to realized that several ideas in our undergraduate work remains reflected on the results of this thesis.

With time, hydraulics appeared in the scene and who better than *Juan David Montoya* for taking the role of Scene Director through more than one project where I had the opportunity to work with during my studies in the Water Resources Master Program. Since then I remain learning from him in several topics.

The advisory of Professor *Mauricio Toro Botero* showed up again during my Master studies, but this time under the detailed inspection of Professor *Jaime Ignacio Vélez* and Professor *Luis Alejandro Camacho*. They not only made a bunch of constructive comments regarding the shortcomings of such work, but also opened my eyes regarding fluvial processes, a topic that caught me immediately so that I began my Ph.D. studies convinced of the possibilities of linking fluvial topics as solute transport topics. Fortunately for such purpose, I had the fortune of having contact with two amazing courses: Fluvial Geomorphology and Multi-Scaling Hydrology. In the former I had the support of Professor *Lilian Posada*, who let me attend the class as an assistant. In the latter Professor *Germán Poveda* gave me that kick that allowed me to realize and study those nice connections among the stream reach-scale and the watershed scale.

The best part of this path happened during the internship I made at Colorado State University in the United States. A special thanks to Professor *Ellen Wohl*, this humbled and bright person who taught me that *Fluvial Geomorphology it is not just research, it is an adventure!*

Finally and not less important, I want to thank the support I always found in my friends Carlos Restrepo, Marcela Jaramillo and Oscar Álvarez, especially in those moments when this path appeared to be unclear and not promissory. Additional thanks to GOTTA INGENIERIA and my associates, who are also my friends, for their support and patience during the critical periods of the Ph.D journey, and for gave to me the possibility to perform new research inside the company..

*Dedicated to my family and those little members coming!*