

Proceedings of the International Symposium Commemorating the  
50th Anniversary of the Universidad Autónoma Metropolitana:  
Applications of Information Theory in Natural Sciences

Departamento de Química, Universidad Autónoma Metropolitana-Iztapalapa

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## Preface

The following special issue represents a subset of the work that was presented in the symposium commemorating the 50th anniversary of Universidad Autónoma Metropolitana: Applications of Information Theory in Natural Sciences, held during January 28-31, 2025, at the Department of Chemistry, Universidad Autónoma Metropolitana-Iztapalapa (UAMI). The symposium used a hybrid format, which provided opportunities for international colleagues to participate in the event. The Universidad Autónoma Metropolitana celebrated its fiftieth birthday in 2024, however it seems fitting that the actual date of the symposium, in 2025, coincided with the United Nations declaration of the International Year of Quantum Science and Technology. Many of the presented works focused on the applications of information theory to quantum science. It should also be mentioned that the Departments of Chemistry, Mathematics and Physics at UAMI, all have active research projects in the applications of information theory to the natural sciences. This symposium represented a joint effort on behalf of all three departments. The talks of the symposium have been recorded and deposited at the Departamento de Química's YouTube site, and are readily available for consultation. The event attracted thirty six participants from Argentina, Brazil, Canada, France, Germany, Greece, Hungary, India, México, Spain, the United Kingdom and the United States. We would like to thank the authors and speakers for their contributions, the Departamento de Química and the División de Ciencias Básicas e Ingeniería of the Universidad Autónoma Metropolitana-Iztapalapa, for their support. Lastly, we thank the editorial staff of the Suplemento de la Revista Mexicana de Física for their efforts on this special edition.