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**Physics in the Andean Countries: A Perspective from Condensed Matter, Novel Materials and Nanotechnology**

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We will discuss the current state of R&D in the fields of condensed matter, novel materials, and nanotechnology in the Andean nations. We will initially consider Latin America and the Caribbean (LAC) to then visualize individual developments, as well as those for the region as a whole in these fields of knowledge in each of the nations constituting the Andean Region (Bolivia, Ecuador, Chile, Venezuela, Peru, and Colombia). Based on Science & Technology watch exercises in the countries involved, along with the Iberian American and Inter-American Science & Technology Network of Indicators (Red de indicadores de Ciencia y Tecnología (RICYT) iberoamericana e interamericana)<sup>1</sup>, we will reveal statistical data that will shed light on the development in the fields mentioned. As will be noted, total R&D investment in Latin American and Caribbean countries remained constant since 1997. In spite of having reached a general increase in publications without international collaboration in LAC nations, the countries with greatest research productivity in Latin America (Argentina, Mexico, Brazil, and Chile) have strengthened their international collaboration with the United States, France, Germany, and Italy through close links associated with the formation processes of their researchers. Academic and research integration is evaluated through joint authorship of scientific articles, evidencing close collaboration in fields of research. This principle has been used in the creation of cooperation networks among participating nations. As far as networks of research on condensed matter, novel materials, and nanotechnology, the Andean nations have not consolidated a regional network allowing permanent and effective cooperation in research and technological development; as would be expected, given their idiomatic and cultural similarities, their historical background, and geographical proximity, which have been integrating factors in other research areas or socio-economic aspects. This panorama reveals the scarcity of collaboration among the Andean nations, one which does not manage inclusion in international statistics. Said isolated research processes in the countries of the region may be responsible for the scant productivity in R&D in the fields of condensed matter, novel materials, and nanotechnology. Countries like Panama, Bolivia, Ecuador, and Peru have increased their investments in research on environmental issues and medicine; while productivity and development in Physics have not been consolidated as state policy in R&D. In conclusion, we will see the results of specific follow up to research in the fields of condensed matter, novel materials, and nanotechnology from an interdisciplinary perspective, describing the research themes in said fields, patents, and registrations.

Reference: <http://www.rieyt.org/> La Red de Indicadores de Ciencia y Tecnología -Iberoamericana e Interamericana- (RI-CYT)