

## Arms of The Bashan Foundation

The Arms were created at the end of 2011 to commemorate the 12th anniversary of the Bashan Foundation. They are a contemporary artistic approach and do not follow any specific tradition and rules of “Coats of Arms” and Seals of individuals, countries, or academic organizations.

They represent the cornerstone belief that scientific knowledge is universal, belongs equally to humanity, and should be easily available to all who seek knowledge without any restriction. Creating and diffusing of new scientific knowledge is a basic right of humanity.

This fundamental truth is illustrated through the Arms, where the specific symbols reflect the personal research preference and creation of new knowledge by the members during the first decade of the operation of the foundation.

Four mottos of the foundation are presented above and below a modified traditional shield.

(Top) “For the increase and diffusion of knowledge among mankind”. It is a minor modification of the motto engraved on the wall of Library of Congress in Washington, DC, USA.

(Bottom) “Knowledge is the face of everything” (in Hebrew).

(Left) “Everything is possible”.

(Right) “Nothing is impossible” (In Spanish).

The shield contains the following elements:

(Center left) A hybrid of a book, a computer, and an e-book representing the creation and collection of knowledge. The front page of the hybrid is the main page of the Bashan Foundation website, implying that the role of the Foundation is to store and diffuse this knowledge.

(Center right) It represents environmental and agricultural investigations of the members, specifically, plant-bacteria-fungi interactions and microorganisms residing in water and responsible for recycling of water.

(Top center and left). This represents nanotechnology. It is composed of three elements starting on the left: (1) Buckminsterfullerene  $C_{60}$ , a spherical molecule composed of carbon and also known as “buckyball”. Modifications in this basic form are of major significance in nanotechnology applications. (2) Three monomers of the polymer polyethylene; (3) The egg-box model of the calcium alginate polymer, a very useful polymer for diverse applications.

(Bottom). This represents molecular studies and their applications. These studies are represented by nucleic acids, RNA, and DNA and their influence on metabolism. The latter is represented by the 3-D model of the protein hemoglobin on the right and by an industrial fermentor on the left, the kind of equipment that contains most of the production activity of commercial molecular applications.

The original Logo of the Bashan Foundation created in 1999 is located in the center of the shield, all blue lines are centered in it and representing a unification of all these diverse investigations and accumulated knowledge.

Colors: Those were chosen according to medieval traditions of colors, where blue represents truth and white represents honesty and sincerity, two fundamental characteristic of every true scientist. The colors of the frame of the shield represent the national flag colors of the three original founders of the foundation: white and blue (Israel); yellow, blue, and red (Colombia); and red, white, and blue (USA).

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